



College AND UNIVERSITY Business

MAY 1950: Town and Gown • Investing in Common Stocks • General Guide
to Space Utilization • Budgeting for Maintenance • Central Purchasing of
Fraternity Food • Advice on Planning • Inflation and Academic Salaries

Health Habits are Formed in the Classroom



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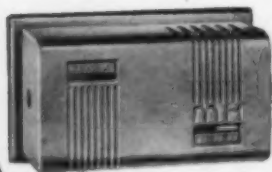
Controlled atmosphere—healthful temperatures, correct humidity and adequate ventilation—presents an opportunity to mold other vitally important health habits.

Authorities have demonstrated that to be mentally alert and responsive children require an even, low temperature because their basal metabolism is higher than that of adults. Overheating produces definite physical reactions. Headaches and drowsiness are symptoms. The result is a dull, listless class.

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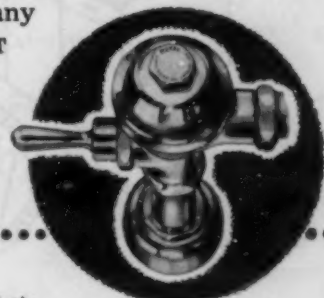
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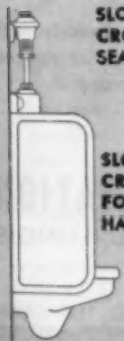
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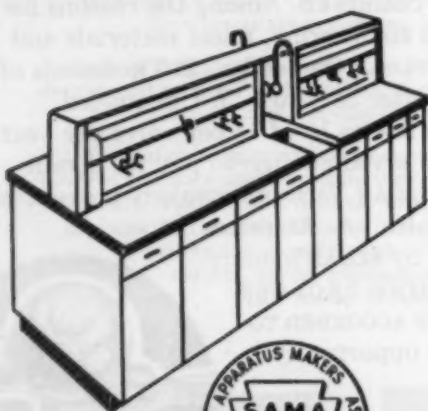


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*Photo-micrographic view of a
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Among the Authors



L. B. Hale

LINCOLN BELL HALE, president of Evansville College, reports on page 19 how college and town have been brought together and the importance of cooperation between local citizens and the college family. A graduate of Yale, he first worked as a draftsman in Ansonia, Conn., and later became a Y.M.C.A. secretary with posts in Ansonia and New Haven. For three years he was assistant director of the Thessalonica Agricultural and Industrial Institute in Greece, followed by another three-year period as a Congregational pastor. Following positions held at Yale and Carleton College, he joined the Evansville College staff as dean and registrar in 1939 and became president in 1941. An author of books and magazine articles, he also finds time to be active in local civic organizations, such as the Philharmonic Orchestra, the Community Chest, Red Cross, and the Mayor's Commission on Human Welfare. . . . RICHARD CAMPBELL WILLIAMS, director of the college union at the University of Oregon, suggests on page 33 the aids to be utilized in planning a new college union building and program. The university is constructing a union building after a nationwide survey of existing college union facilities. Mr. Williams has been a member of the university staff since 1941, except for a three-year stretch as a navy officer in the Pacific area. He boasts of a lovely wife, three sons, and an infant daughter "whom daddy is spoiling."



W. W. Kraft

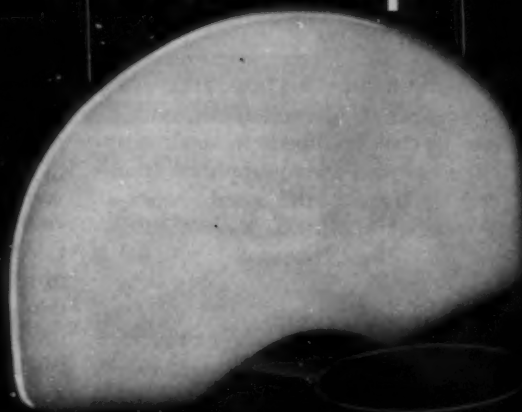
WALTER W. KRAFT, director of physical plant at the University of Oklahoma, emphasizes on page 37 that building maintenance is the biggest item in the physical plant budget. Except for a two-year period as commissioner of public streets in Evanston, Ill., he has been in physical plant responsibilities at the Agricultural and Mechanical College of Texas and at the University of Oklahoma for 32 years. Active in athletics, he was captain of Northwestern University's football team, coached for a number of years, and is currently a member of the bowl games committee of the National Collegiate Athletic Association. He was appointed a member of the athletic council at the University of Oklahoma in 1934 and since 1936 has been president of the council. He also is the university's faculty representative to the Big Seven Conference (Missouri Valley Inter-collegiate Athletic Association). Until a few years ago, he frequently officiated at football games.



D. D. Lancaster

DONOVAN DEAN LANCASTER, manager of the Bowdoin College Moulton Union and director of the college's centralized dining room service, discusses centralized food purchasing on page 40. He has been a member of the college staff since 1927, when he became freshman football coach. He is now president of the National Association of College Unions and is active in fraternity and alumni affairs. An ardent sportsman, gardener and athlete, he also maintains an active interest in church and boy scout affairs in his area.

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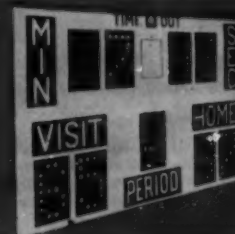
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Questions and Answers

Dining Room Arrangements

Question: We are considering the construction of a dining hall in which the kitchen will be on a lower floor than the dining room. Service will be handled by conveyors and elevators. What are the advantages and disadvantages of such an arrangement?—S.F. Ohio.

ANSWER: The advantages or disadvantages of such an arrangement would vary with the type of service being used. In the case of a cafeteria service, it is preferable to have the hot foods cooked and served from the same floor. However, if the dining hall is to be used for serving family style, there is a definite advantage in having the kitchen on a lower floor. In general, the advantages of having the kitchen on a lower floor from the dining room are:

1. There is a quiet atmosphere in the dining room.
2. More compact arrangement of supplies is possible.
3. Supply lines from receipt and storage areas to food production areas are shorter. This is a distinct advantage that always results in a saving of labor.
4. The ease of locking storage and food production areas usually results in the dining room being placed so that there is a good view and also in a more clear-cut departmentalized organization with closer supervision. It also permits more feasible use of employes from one department to another and the use of dining rooms for other social functions without interference from noises from the kitchen.
5. The subveyor operation for soiled dishes is advantageous and shortens the lines to the dishroom.

Disadvantages include:

1. Congestion of conveyors and elevators at mealtime.
2. Expense of installing and operating elevators.
3. Inconvenience when conveyors or elevators break down.
4. Undesirability, from employes' point of view, of working in a basement.
5. Slows the supply of foods to the lines and results in the cooking of large quantities of food at one time.

At Duke our kitchens are on the same floor as the cafeterias, and we like to cook the foods in small quantities and continue to supply the counters throughout the meal hours.—THEODORE M. MINAH, *director of dining halls, Duke University.*

Hiring a Union Director

Question: In planning for construction of a college union building, when is it desirable to employ the director who will operate the building?—M.R., Va.

ANSWER: If your school were to build a new chemistry building, you would naturally consult the head of the department as to his requirements. The same applies with a union building and the hiring of a director.

It is not good judgment to have a union building planned by a committee of sincere but inexperienced people. It is not economically sound to build a union and, after completion, expect a stranger to step in and run it and make a profit or make expenses.

A union is the most complex of all buildings to plan, for the facilities are extremely varied and extensive. Remember, there is no substitute for experience.

For a more detailed article on this subject, see the March 1950 issue of the bulletin of the Association of College Unions, page 7.—PHILIP E. KEENE, *college architect, State College of Washington.*

If you have a question on business or departmental administration that you would like to have answered, send your query to COLLEGE and UNIVERSITY BUSINESS, 919 North Michigan Avenue, Chicago 11, Ill. Questions will be forwarded to leaders in appropriate college and university fields for authoritative replies. Answers will be published in forthcoming issues. No answers will be handled through correspondence.

Paint Over Wall Covering?

Question: We are thinking of painting residence hall walls that are now covered with washable canvas-base wall covering. We will paint over the present covering. Will we be saving on future maintenance costs?—D.R., Ga.

ANSWER: It is difficult to answer this question without being more certain of the exact type of wall covering involved. I have counseled with our chief painter and our director of physical plant, and we are of the opinion that if the covering referred to is the type frequently used in some of the finer homes and if it is in reasonably good shape and is adhering to the walls well, painting over it with a good grade of paint should result in economical maintenance.—LEE BURNS, *director of residence halls, University of Wisconsin.*

Expansion Plans

Question: We are in need of assistance in developing plans for our campus and in determining the order of buildings to add to our plant facilities. We would want to know, for example, whether with our present facilities we should concentrate upon adding a library or a science hall.—P.E.S., Kan.

ANSWER: The fundamental requirement is a statement of the immediate and long-range objectives of the institution. This requires a study of the educational philosophy of the college with recommendations from the various deans and department heads as to hopes or plans for their respective departments. From these it will be possible for the administrator and the board of trustees to project what the needs for the institution will be. It is not possible for an outsider authoritatively to state that the institution needs a library more than it needs a science hall or a gymnasium. The existing facilities, the educational objectives and the need for buildings to meet these objectives will determine the respective priorities of the buildings.

After determination of the educational objectives, it then will be possible to work with building and landscape architects on the physical layout of the campus and the orientation of the buildings.—H. W. HERMAN

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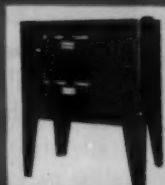
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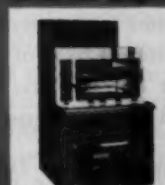
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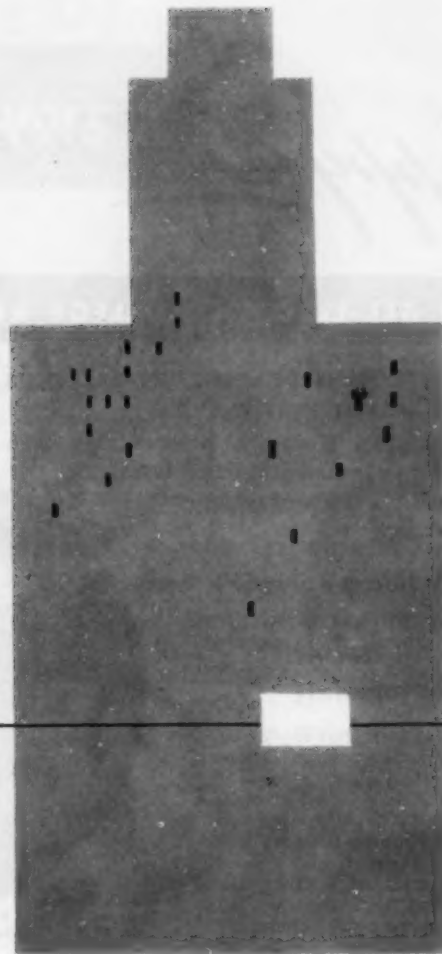
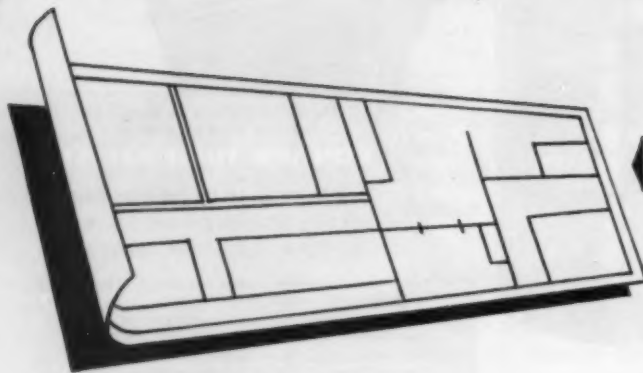
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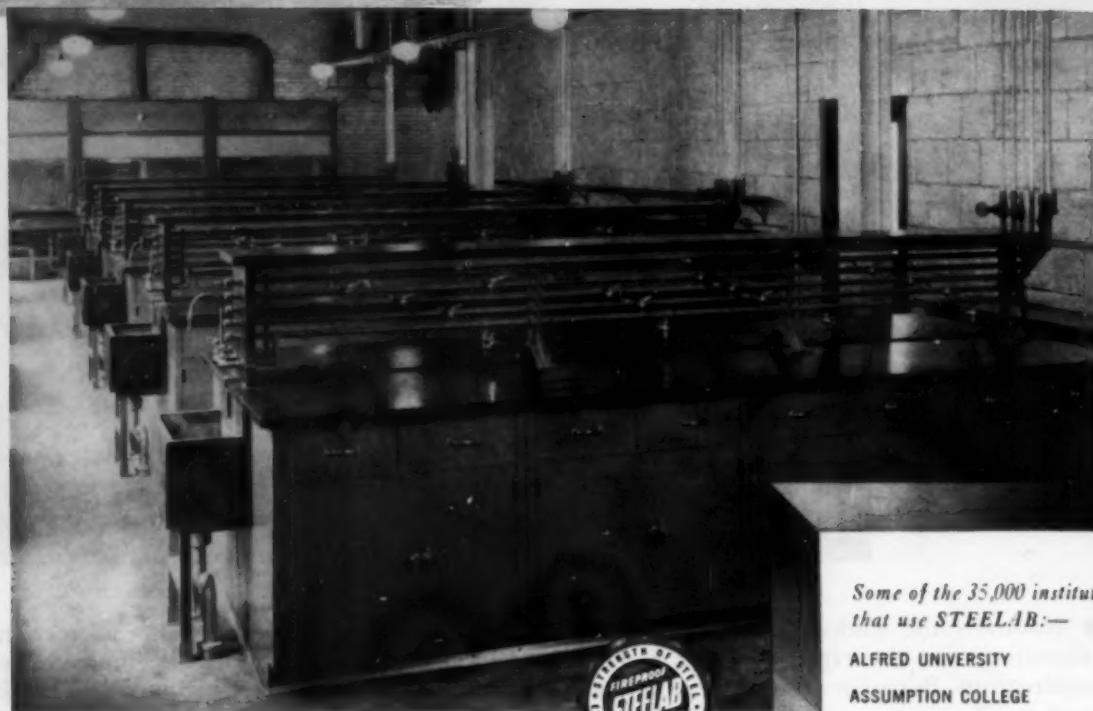


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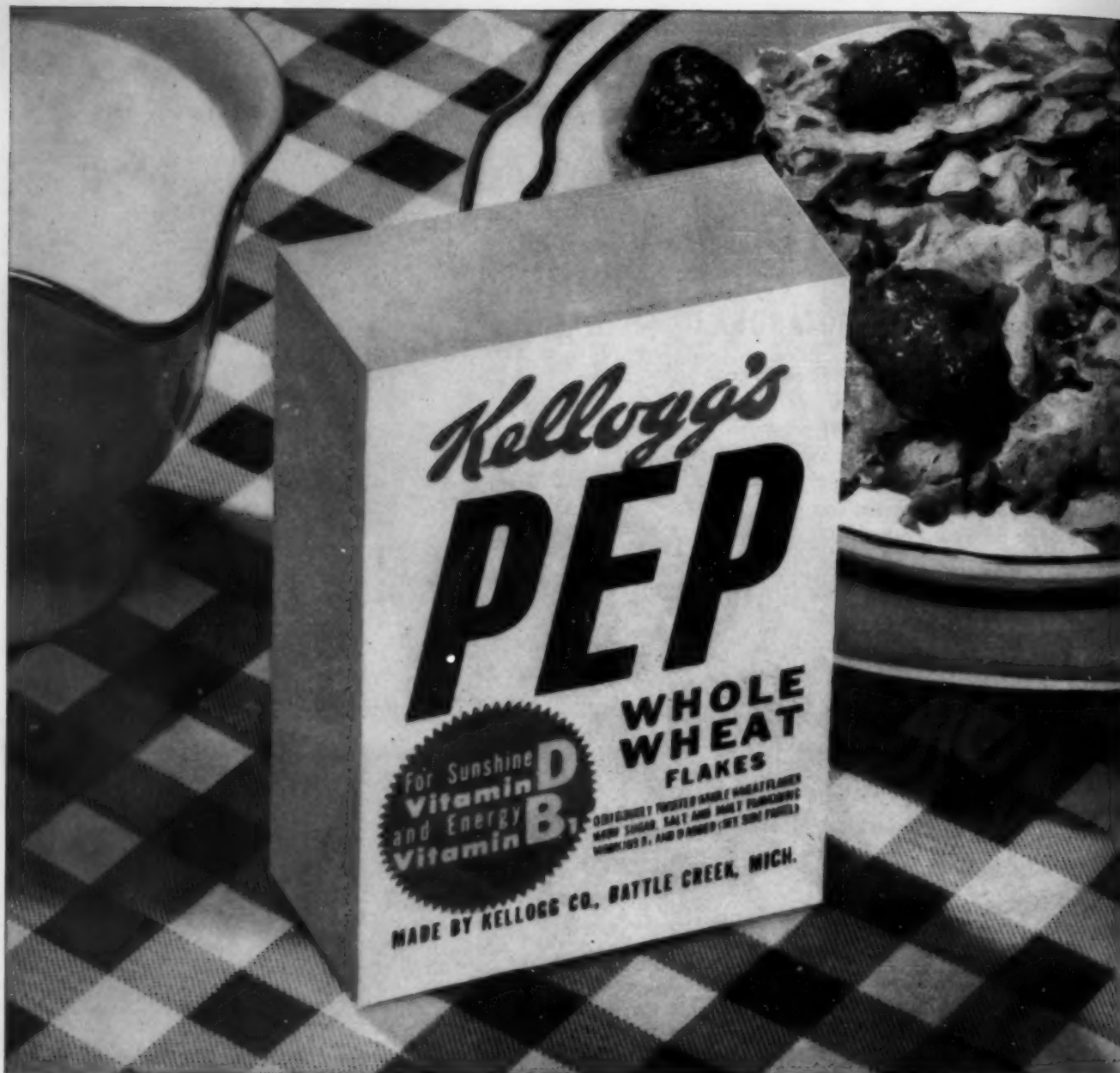
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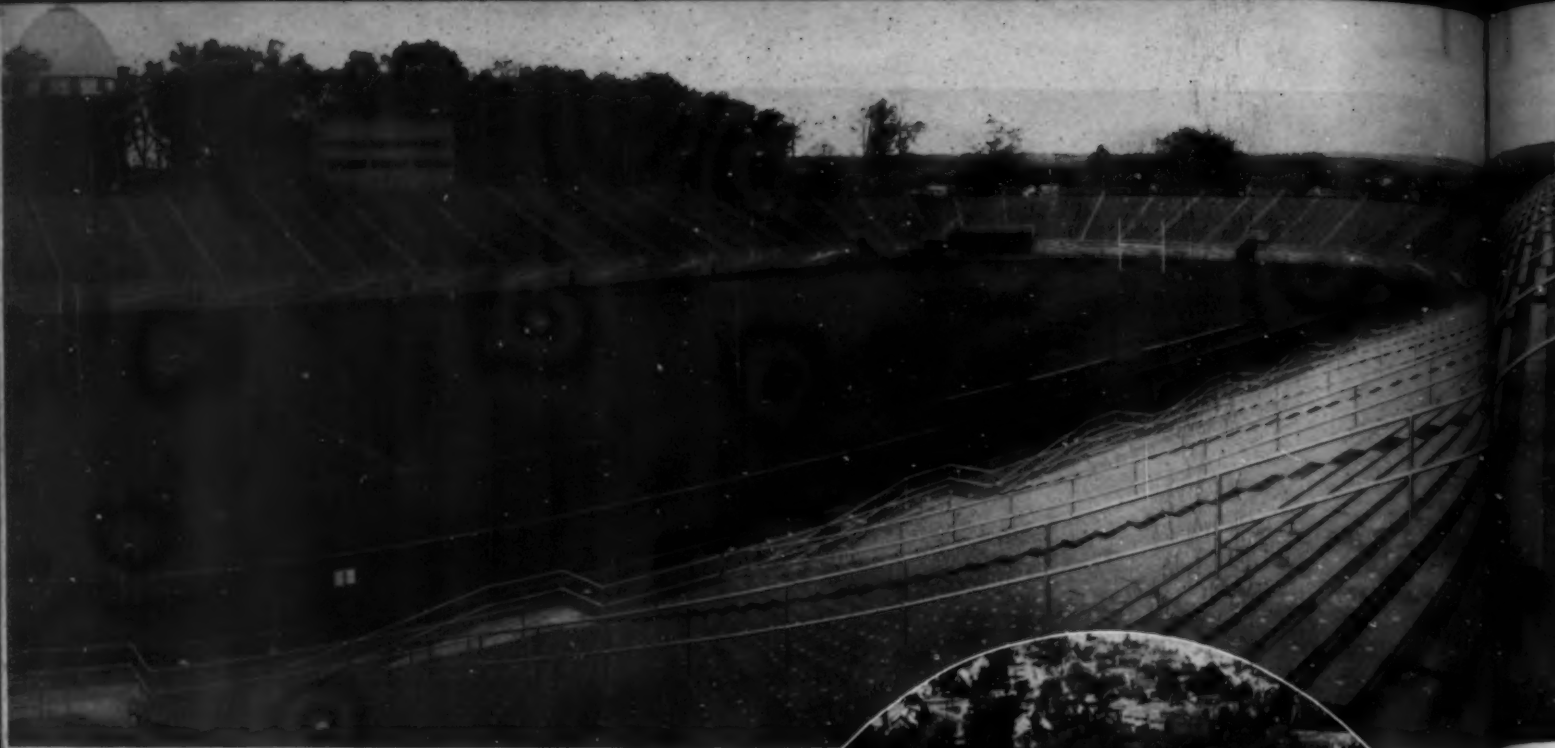
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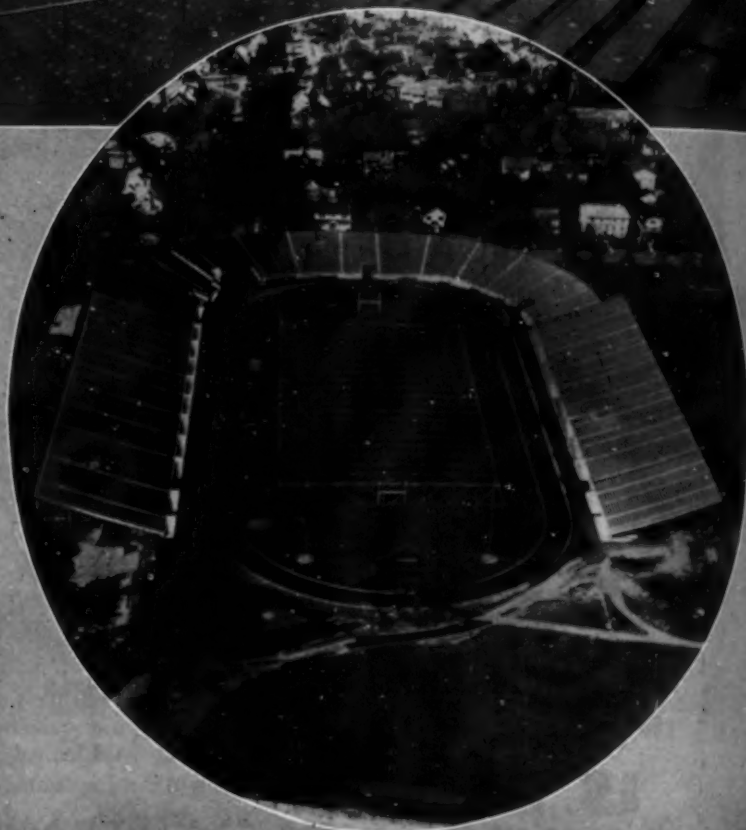
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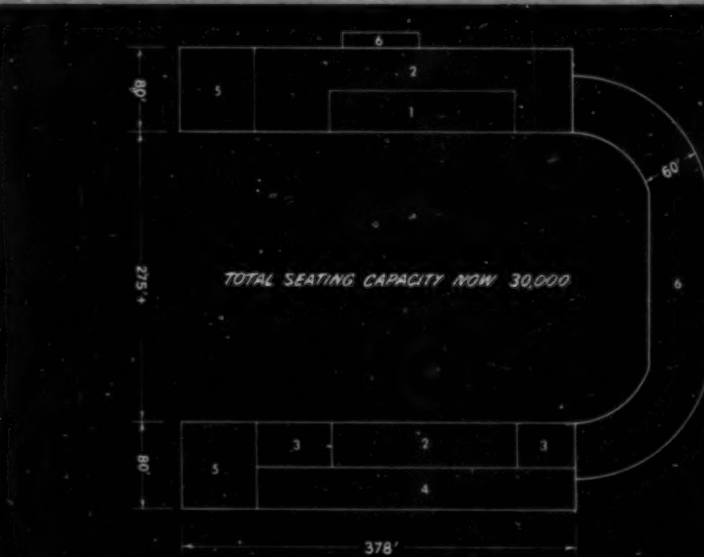


Top—General view of the Penn State stadium at New Beaver Field.

Right—Aerial view shows present horseshoe layout of the steel structure.



Above—East and North sections of the stadium, showing ramps at aisles.



Left—West section, with press box. Sheltered dressing rooms, drying room and training room are built under weatherlight deck.

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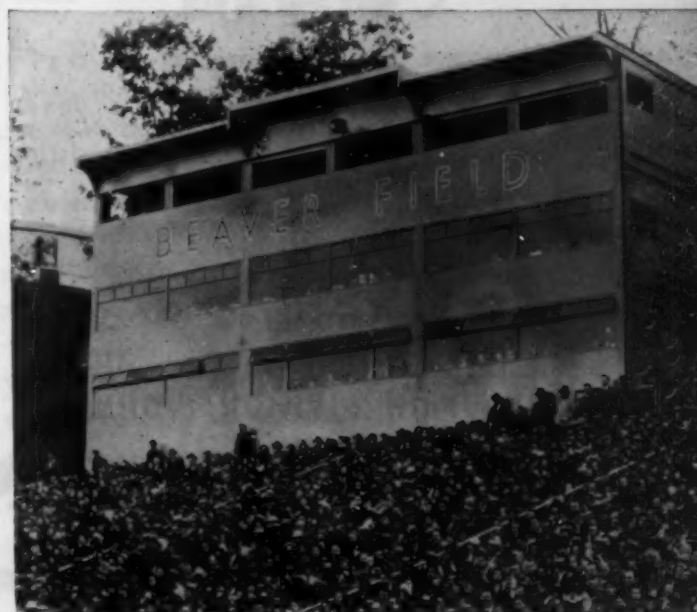
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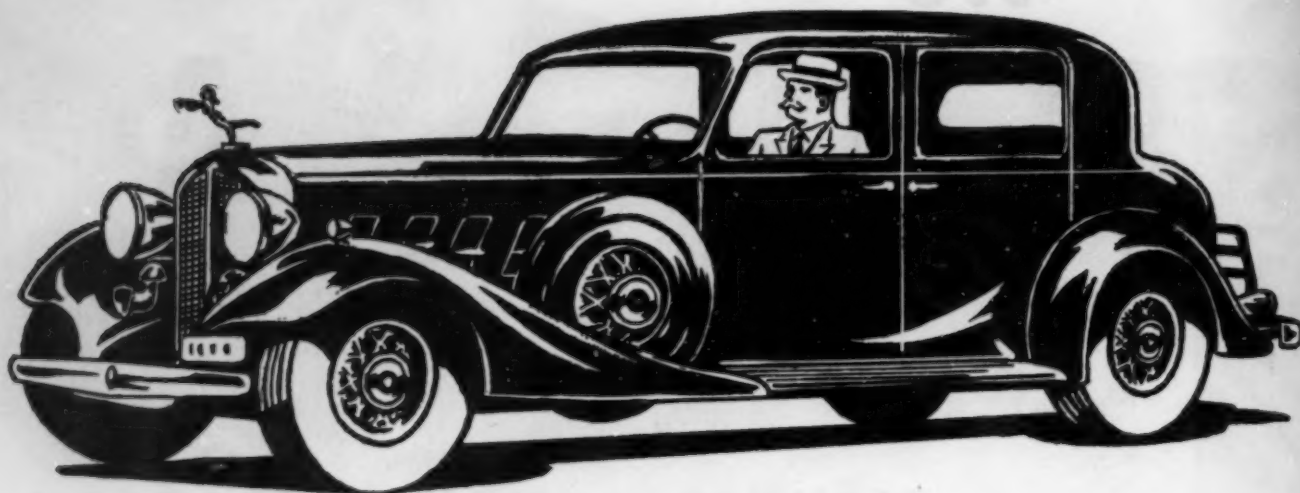
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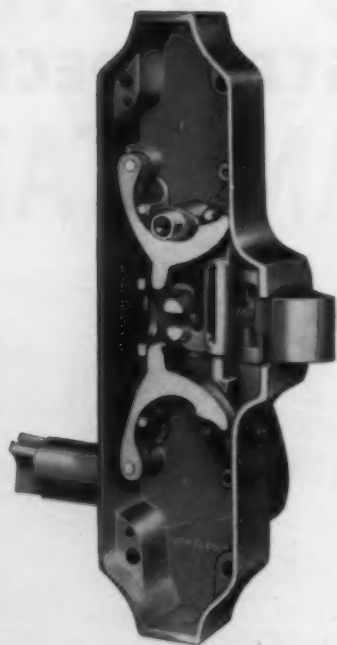
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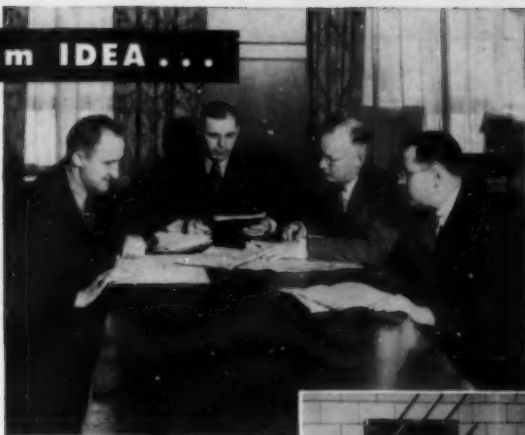
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SHOULD THERE BE COLLEGE TRAINING FOR ALL?

SEYMOUR E. HARRIS

Professor of Economics, Harvard University



SHOULD OUR INSTITUTIONS OF HIGHER LEARNING continue to enroll 2.5 millions over the next 20 years, our college population would number more than 10,000,000. Should enrollments rise to the 4.6 millions suggested by the President's Commission (PC) on Higher Education, the college population would reach 15,000,000 by 1970; and eventually there would be 30,000,000 with a college education and 20,000,000 additional with the equivalent of a junior college education—one-half and one-third of the adult population, respectively.

Even a college population of 10,000,000 by 1970 raises serious economic, political and sociological problems. The total of professional, business and executive openings in 1940 was but 6,000,000 and in 1950 between 7,000,000 and 8,000,000, with college trained men and women accounting for about one-half. On the basis of past experience, the openings in these occupations to college men and women are not likely to exceed 5,000,000 to 6,000,000 by 1970. Therefore, there may well be two to three applicants for each position commensurate with the training of college men and women.

This excess of demand over supply of appropriate openings may be reduced as college trained men and women squeeze noncollege personnel out of the professions and business. "Squeeze out" is an inaccurate way of putting it: the college graduate will capture the vacancies created by retirement, death or expansion. Indeed, there are many occupations that can use a much larger proportion of college trainees.

But even allowing for these alleviations, there will be a rise in the college population of from 3,000,000 in 1940 to 10,000,000 or 15,000,000 in 1970, with a resultant serious depression in the relative economic position of the college graduate. As the *Fortune* survey of 1949 showed, parents of almost all male students and a large majority of the parents of female students sent their children to college primarily to improve their economic position.

These parents should note that the pressure of floods of college graduates has already been reflected

in a substantial decline in the relative pay of white collar workers and in a significant reduction in the advantage of college graduates over noncollege graduates in the labor market.

Of course, the educator can claim that colleges train for the good life, for citizenship, for parenthood, for the well rounded man and woman. In fact, a distinguished president of a great university seems determined to exclude vocational gains from higher education. The position apparently taken by the Harvard Committee on General Education that training for life includes training for useful work, that vocational and nonvocational gains of education are not easily unscrambled, and that the well disciplined mind is an asset for the well rounded graduate in both his work and his other activities seems more sensible.

But whatever the objectives of the educators, we also have to take into account the goals of the students and their parents, who largely pay the bill. Indeed, the colleges should insist on general education, on training broadly for life. But we shall be far from fair to our students if we omit from consideration the economic aspects of higher education.

They should know that they may be disappointed in their economic gains; that the material gains of higher education are likely to become less important, and that the time may come when the plumber or taxi driver will earn more than the average college graduate. Then, as the inexorable laws of supply and demand operate, the gains in education for the graduate increasingly will become noneconomic.

Are there any solutions of this dilemma? Obviously one is a frank assessment of the prospects; and here we need more facts and study. (I tried to make a beginning in my "Market for College Graduates.") A second point is increased emphasis on nonvocational aspects of education. A third is the continued support of the junior terminal college as proposed by President Conant and others. As the junior college becomes more important, the influx into the colleges and the professional schools will be reduced, and this will be salutary.

Looking Forward

Academic Freedom—for What?

THE RECENT CASE AT WAYNE UNIVERSITY IN WHICH President David Henry denied Herbert J. Phillips, expelled faculty member of the University of Washington and an avowed Communist, from participating in a university debate will cause many to cry out that "academic freedom is in jeopardy."

This might well provoke the question as to whether academic freedom is freedom or license. Freedom presumes that it must carry with it responsibility or it degenerates into license and mob-rule irresponsibility.

If the subject of communism were presented in debate for consideration in the world of ideas, one could not quarrel with the right to a forum. It is becoming increasingly apparent, however, that this is the excuse or wedge that is being employed to disseminate a doctrine demonstrably proved to be treasonable in character. It is much more difficult to draw the line between political discussion and thuggery in the practice of communism.

It would be unreasonable to expect that a professor of economics would be permitted to teach a course in banking in such a manner as to encourage among his students the principles and technics of embezzlement. Academic freedom could hardly be justified in such a case. Yet, with anguished cries and beating of their righteous breasts, some professors cry for "justice" if they are restrained from promotion of a philosophy that is dedicated through violence to the overthrow of the very institutions that they have pledged to defend.

Time will tell whether President Henry of Wayne University made a wise decision. Shorn of the circumlocution of rhetoric, it appears realistic.

Convention Timing

IN MOMENTS OF REVERIE, WE OFTEN HAVE WONDERED how the administrators of small colleges face the spring rash of conventions. As will be noted elsewhere in this issue, dates of conventions of college administrative groups seem to be established entirely irrespective of one another.

It is a matter of record, for example, that this year the proximity of dates and the disparity of geographic location are militating against attendance at both the Central Association of College and University Business Officers in Urbana, Ill., and the National Association of Educational Buyers in Houston, Tex.

Administrators in small colleges, who must be responsible for a variety of job functions, need the pro-

fessional help and growth afforded through attendance at conventions. More attention to avoiding conflict in dates of conventions of such professional groups would be a genuine contribution to the education of a small college administrator.

The Art of Compromise

FOR MANY PERSONS, THE WORD "COMPROMISE" HAS an odious connotation and is regarded with aversion. Typical of this attitude is Tryon Edwards' comment that "Compromise is but the sacrifice of one right or good in the hope of retaining another—too often ending in the loss of both."

College administrators constantly are faced with the necessity of making decisions. At some point in negotiations with others on matters of policy there must be a meeting of minds. As a rule, the parties to the decision have each yielded somewhat from his original premise. Hence, compromise has taken place.

John Henry Cardinal Newman in his discourse No. 2 in "The Idea of a University" makes this pertinent observation:

"I think this will be found to be no matter of words. I allow then fully, that, when men combine together for any common object, they are obliged, as a matter of course, in order to secure the advantages accruing from united action, to sacrifice many of their private opinions and wishes, and to drop the minor differences, as they are commonly called, which exist between man and man. No two persons perhaps are to be found, however intimate, however congenial in tastes and judgments, however eager to have one heart and one soul, but must deny themselves, for the sake of each other, much which they like or desire, if they are to live together happily. Compromise, in a large sense of the word, is the first principle of combination; and anyone who insists on enjoying his rights to the full, and his opinions without toleration for his neighbor's, and his own way in all things, will soon have all things altogether to himself, and no one to share them with him. But most true as this confessedly is, still there is an obvious limit, on the other hand, to these compromises, however necessary they be; and this is found in the *proviso*, that the differences surrendered should be *but* 'minor,' or that there should be no sacrifice of the main object of the combination, in the concessions which are mutually made. Any sacrifice which compromises that object is destructive of the principle of the combination, and no one who would be consistent can be a party to it."

TOWN AND GOWN

To eliminate the frequent conflict between the two, a college must become an educational service station to the community

I HAVE BEEN AMAZED AGAIN AND again to discover how little the community knows about the activities and purposes of a college which are common knowledge to those who participate in the campus experience. In turn, the faculty and staff often are isolated from the community through lack of knowledge or appreciation of the daily doings, the dreams, the aspirations, and the planning which are part and parcel of the geographical social grouping in which the college has its existence.

Are we to wonder, then, that conflict exists between town and gown? From time to time a crisis in these relations arises. It may express itself in a lack of understanding and support by the community of the college in its time of need. Communities have been known to take punitive tax actions against colleges and universities. Its extreme form has been expressed in town and gown riots during which animosities have developed that required years of good public relations to overcome.

Can the conflict be eliminated? My answer is not only an unequivocal yes, but an insistence that the ultimate purposes of education are such that every college and university as a part of its normal program should see that only the finest possible relations exist with the community of which it is a part.

It must be recognized that there is no simple answer to town and gown relations. Colleges are social organisms of which no two are alike. The problem for Wabash or DePauw, located in small Indiana towns with residence halls housing students who come from outside these communities, is quite different from that of Butler or Evansville, located in larger Indiana cities with the majority of the student body

living at home. Again, many large universities are in small towns, and their problem is still a different one. Moreover, the church related college in any of these situations has a pattern different from that of the independent or public institution.

Yet these differences and the complexity that they suggest should not disturb us. They simply say that there is no one patent solution. I can only hope to offer suggestions which can be adopted in part or which may stimulate a chain of thought and ideas that will lead a college to an adequate solution of its own problem. Yet solution we must find, for it is inconceivable that college leaders will continue to permit town and gown to be set apart. Our common stake is too great.

EXISTS FOR WHAT PURPOSE?

The question is largely one of point of view. Does a college exist incidentally in a community, or does it exist as an institution to serve that community and to become accepted by the people as their own college because of the contribution it makes to the total community life and development? Obviously, the answer does not lie in a clear-cut choice.

A college may follow the ivory-tower tradition, being little concerned about the community at its feet. It may insist that the search for truth is paramount and proclaim that truth with a clarion voice. The danger here is the failure to assume a proper place in the community and the responsibility that goes with it.

LINCOLN B. HALE

President, Evansville College
Evansville, Ind.

On the other hand, a college may seek out the needs of youth and adults and of the many institutions that are a part of the community, and try to serve these needs with a quality program. As such a process gains the support of community leadership, there is the danger that the institution will lose sight of its responsibility for truth and for holding forth the challenging torch that draws persons, even a whole community, ever forward and upward toward beauty, finer achievement, and brotherhood.

The answer to the problem we have posed, namely, the elimination of conflict between town and gown, lies in the solution of this dilemma. The traditional concept of a college can be defined by terms such as these: ivory tower, house by the side of the road, place where youth withdraws (generally in part only) from the active stream of life and sharpens his tools, a place of getting ready for commencement day. The principal idea is that college represents a withdrawal, and the tendency is thus to accept the position that the college is significant in itself and disregards the responsibility for the community in which it resides.

What a loss! We would teach the ideals of service, yet we would fail to accept a service responsibility for the community of which we are a part. We would teach our students to be mindful of a world community, a national community, a state community, yet ignore the community at the college doorstep. We would teach our students economics, sociology, political

science, psychology, yet overlook the laboratory awaiting our opening of the door if we will but study the needs of the community at hand and seek ways and means for students, faculty, the whole institution, to share in the building of a finer city or town.

It is my firm conviction that every college and university must in a very real sense undertake a responsibility for wholehearted cooperation with the community in which it lives. It is the way to mutual understanding. You cannot work at a common problem very long in the spirit of neighborliness without respect and confidence developing. Someone once suggested that in attacking any given problem, one should start where he is—perchance with himself first and then the fellow next to him. I simply cannot get away from the fact that if we are trying to build a better society we should start where we are, working with our own home folk.

How to do it? Let me report something of our Evansville experience. It is a college located in an urban center and is deliberately developing the urban pattern of higher education.

In 1916 George S. Clifford, a director of the Evansville Chamber of Commerce, repeatedly told his associates that if they wished to make Evansville a finer city they should build a college. Mr. Clifford was a businessman, but his interests were in nature, astronomy, philosophy and religion. His

voice was heeded, with the result that Moores Hill College was moved to Evansville in 1919 and renamed Evansville College. It started as an institution in Evansville to help build a finer city.

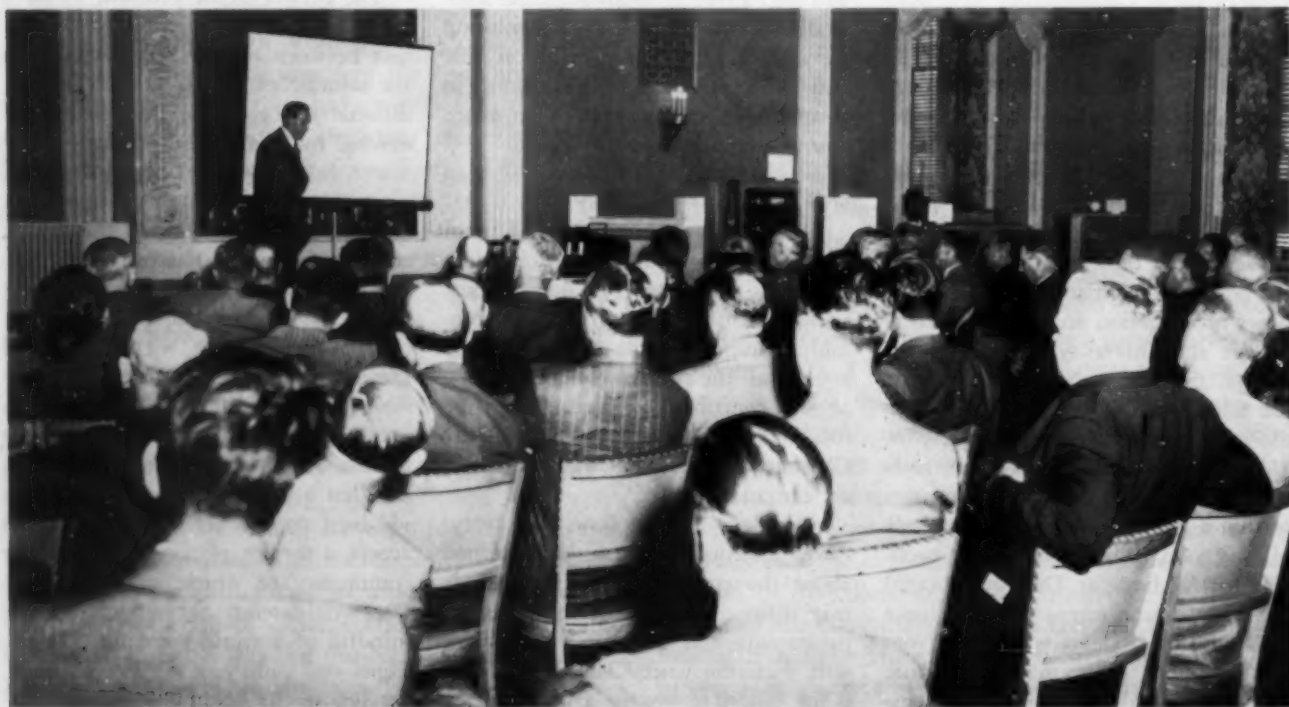
Its history is interesting to follow. For some 10 years a program built largely upon community needs, but consistent with good higher educational practice, was developed. The community was spoken of as the laboratory for the college. It was a new and novel idea and a challenge to the more traditional idea of a liberal arts, church related college. As leadership changed gradually the program moved back to a more traditional pattern. The college came to be looked upon as being incidentally located in Evansville and with no greater significance for the community. Loyal and devoted friends stood by, but the wholehearted community support of the early years was gone. Indeed, lack of understanding and indifference best characterized the attitude.

It then became clear that a return to the founding concept should be made. Evansville College had come into being to help build a finer city. That meant being true to its fine liberal arts, church related tradition inherited from Moores Hill College, seeking out the felt needs in many areas of community life that lie within the scope of higher education, and building a total collegiate program of education adequate for the

situation—a difficult task but not an impossible one.

The problem was essentially one of bringing understanding and knowledge of higher education and the assistance it could offer a community, and coupling it with a willingness to be of service to the community. It meant being concerned not merely with the obvious felt needs but also with the opening of challenging vistas that would contribute to the growth of the finer city. How was it attempted? And how is it being accomplished? These brief suggestions grow out of 10 years of experience with the concept.

Educating the Community. Great emphasis is being placed upon explaining the function of the college. Presentations are made by members of the staff. A public relations department was organized and charged with the responsibility of so cultivating the newspapers and radio that they understood the college and would use news about the college that was news. Great care is taken to see that all printed materials bear the stamp of quality and help explain the college's program. The president, at the suggestion of a trustee, has issued some 30 "Notes From the President's Desk" which have gone to community leaders to explain phases of the college's activities and problems. Faculty members are urged to associate themselves with their normal social grouping, be it church, civic club, or neighborhood group. All these ac-



Creative expression for adults is taking the place of vended amusement. Music, philosophy, art, Great Books, and other cultural interests have won acceptance alongside hobby and vocational interests.

tivities are directed to the end that understanding be developed between town and gown.

Educating the College. This must be a two-way process. Thus staff and faculty participate actively in civic affairs. Hearty support is given the social agencies and character building groups through active participation and leadership in the Community Chest, Red Cross, and similar activities. Faculty members are urged to participate actively in civic groups allied with their professional fields. In setting up an expanded adult educational program, meetings were held with four representative groups, each composed of citizens, faculty and trustees, to review a proposed program, thus obtaining from the community ideas that were incorporated in the program finally set in motion.

EVALUATES COMMUNITY NEEDS

An advisory committee representative of civic interests is of constant assistance to the evening college. A vice president as director of adult education has the distinct function of consulting with community leaders and agencies to discover and evaluate needs. All these activities are directed to the end that the college staff become conscious of the aspirations, dreams and problems of the community and through this knowledge be able to make an intelligent contribution.

Adult Education Program. A truism of modern education is that the learning process should not end with the high school diploma or the bachelor's degree, but continue through the years. So every effort has been made to discharge this responsibility. Credit and noncredit courses of all types and kinds are conducted. Music, philosophy, art, Great Books, and other cultural interests have taken their places alongside hobby and vocational interests. Creative expression for adults is taking the place of—or at least supplementing—vended amusement or the ever-present bridge game. Classes for the most part have been conducted on campus, but the college has been ready to go to the class when that best served the purpose. Deep appreciation has developed in the community as adults have experienced and seen the value of such a sound educational program.

Use of Buildings and Equipment by Off-Campus Groups. We have encouraged the full use of our facilities by off-campus groups limited only

by the condition that there be no interference with the normal program. The vice president, director of adult education, promotes and supervises these activities. He works closely with off-campus leaders in planning programs, getting speakers, and watching carefully the on-campus meetings to see that the best possible service is provided.

Last year the A.F.L. Ladies Garment Workers Union met for a regional educational conference. The Vanderburgh County Medical Society holds a monthly afternoon and evening post-graduation seminar. Regional school meetings are held with increasing regularity. All types of civic and professional groups are turning to the college as a place for meeting.

Development of Curriculums to Meet Apparent Needs. In 1943 we conducted a study of community needs that was reported in a monograph entitled "A College Studies Its Community." As a result, certain specialized curriculums were developed. A cooperative engineering program has the wholehearted support of industry.

The three local hospitals asked for help in approaching higher educational standards with the result that all nurses now receive 10 hours of college credit instruction, and a cooperative plan permits nurses to obtain their degrees through a program of instruction taken either before or after their nurses' training. A curriculum for the training of medical technologists also has been developed. These are in addition to the more accepted teacher training program and are of special value because of the close cooperation required with the community institutions.

Specialized Services. There lies within a college faculty and organization many significant specialized services that can be rendered a community. Our counseling and testing services have undertaken specific testing programs for industry to the end of helping it with foreman selection and employe upgrading. Members of the economics department as part of a regular college assignment have served as part-time personnel consultants to the larger retail stores. These services are on a fee basis, but they suggest not only the service value to the concerns involved, but also the value of such contacts for the teaching staff.

Sharing in Building a Finer Community. All that has been stated here-

tofore is applicable, but there are areas of activity and interest worthy of special reference because they are in the realm of aspiration. We have sought to cooperate with and support all such creative forces. The Evansville Philharmonic Orchestra is a civic organization, yet the college provides the conductor and lends its full support through the efforts of its music personnel, its buildings and equipment, and constant promotion. Similar activities have been carried on with the Evansville Museum of Arts, History and Science.

Of particular concern has been the working relations with the churches of the city. Although Methodist related, the college, consulting with an interdenominational committee of clergy and laymen, has sought not only to strengthen its own religious program but to contribute significantly to the churches of the city. A curriculum designed for the training of church secretaries and teachers of religion developed from these cooperative associations. Moreover, as members of the college faculty and staff move through the community, many indeed are the contributions they make of insight, realism and idealism which contribute to the building of a finer community.

SOCIAL OBLIGATION

There may be suggestions in this experience of one college that will be helpful to others. Differences in purpose, location and opportunity are recognized. But surely there is no college but that can find ways and means of identifying itself with the community in which it exists. Thus it discharges a fundamental social obligation and eases the tension of town and gown. It is obvious that conflicts of purpose and method will arise, but these are but a part of the normal functioning of our society; solutions can be found.

Would we eliminate the conflict of town and gown? Then we must see our college in a dual rôle, namely, as an educational station of service concerned with the total problem of higher education in our communities and, at the same time, a lighthouse of achievement, beauty and brotherhood, challenging the total community, the youth and adults we serve, to finer goals and purposes. With the understanding that comes from mutual cooperation there will be little place for the tensions that have marred town and gown relationships in the past.



What should investments in **COMMON STOCKS**

accomplish?

IT IS NOT SURPRISING TO FIND COLLEGE endowment managers increasingly reluctant to buy dollars for future delivery. Inflationary trends make the value of such purchases most uncertain. The low interest rates promised by borrowers add no attraction.

What should investments in common stocks accomplish? Are they an easy answer to the call for greater income in a period of high costs? How may the risks inherent in common stock ownership be reduced? Will new developments, such as the introduction of industrial profit sharing plans and government controls, gradually reduce returns from stock investments, or will they have a stabilizing influence on dividends? These are some of the questions that every investor faces. Simple and reliable solutions are not available. But until the

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questions can be answered, they must be watched and studied.

Investments in common stocks provide direct participation in business profits. But access to business profits brings with it exposure to great variations in dividends and the possibility of principal loss. Prudent management will accept a high ratio of common stock holdings to total investments only if the risks are calculated and some provision is made for them. There are good reasons to believe that common stock investments may yield greater immediate budget support than fixed income investments, and, at the same time, provide adequate reserves against income fluctuations and principal losses.

What portion, then, of common stock dividends should be treated as income and what portion laid aside to meet contingencies created by common stock ownership? One answer to this question would be found in the rate of income that might be considered satisfactory for mortgages and bonds in a period of stabilized currency. As an example, if 3.8 per cent should seem to be a fair return for long-term investments, then it would seem logical for the institution to spend 3.8 per cent for current needs and to lay aside for income stabilization and a reserve against principal losses all dividend income in excess of 3.8 per cent of the book value.

One purpose of common stock investments is to guarantee purchasing power and level operations during years when fluctuations in values make

stabilized operations difficult. It is essential, therefore, that steps be taken to see that common stock investments really yield the advantages desired. The creation and maintenance of an adequate income stabilization fund would seem to be the proper method.

Investment committees are sometimes too greatly concerned with the principal gain and loss account to exercise clear judgment in making investment decisions. Formula plans of investment distribution have not eliminated the possibility of selling the wrong stock when a reduction of common stock holdings is indicated. If sales are made on the basis of realized gain, less desirable holdings may be retained when they should be sold, and the quality of the investments as a whole will gradually fall. The creation and maintenance of a reserve to cover possible principal losses should tend to ensure the exercise of calm judgment by the investment committee without the distraction of considering the effect of sales upon the realized profit and loss account.

SCHEDULE WITH A PURPOSE

During the 20 year period before 1940, many endowed colleges enjoyed the stabilizing influence of high-grade fixed income securities. When state and national bank holidays came, institutions with adequate current fund reserves in the form of government bonds met their pay rolls. A strong investment schedule is especially effective when made with an eye to purpose. There will continue to be times and places where fixed income investments meet specific requirements more satisfactorily than do variable income securities.

Colleges that owe substantial amounts of money will do well to take that fact into consideration when determining a desirable ratio of common stocks to bonds and mortgages. In the nontax-supported college, endowment securities often are the ultimate guarantee of debt payment. When residence hall or other auxiliary activity income will not meet interest and

principal amortization payments, the general educational budget takes over. If the load upon the educational budget becomes too great, considerations of prestige and institutional pride do not favor the sale of college buildings to satisfy creditors. The endowment is more likely to be sacrificed, and that possibility leads to consideration of greater holdings in sound bonds since ordinarily security values are lowest when defaults occur in debt service payments. No college incurs a debt until other sources of funds have failed to meet the needs. Prudent management will guard against excessive common stock investments of endowment under such circumstances.

Common stock investments faithfully and scientifically administered should afford some protection against loss of purchasing power and provide relatively adequate income for current expenses in periods of high business activity. Unless adequate stabilization reserves are created, fixed income endowment investments are needed for reliable budget support in periods of low business activity. Low grade fixed income investments, if carried at all, should be classified with common stocks, although they do not have equal advantages. When business profits decline, low grade bonds may go into default. On the other hand, when good business conditions or inflation drives prices up, low grade bonds have limited ability to ensure continued purchasing power.

All that has been said about risks of common stock ownership must be reemphasized for direct ownership of operating businesses and commercial or industrial real estate. At a time when the government is considering ways to increase educational opportunities for the nation's young people, it seems entirely appropriate to encourage our colleges, which are operated not for profit, to do everything possible for themselves before requesting grants from tax sources.

For fair competition and equality of business opportunity, operating businesses wholly owned by colleges

should pay to those colleges as much as competing businesses pay in federal income taxes. After this, or a similar provision for equality of opportunity, it seems fair to assume that the government and the country's businessmen will have no objection to a college owning all of the stock of an operating business.

Economic changes and low income return have driven colleges out of bond investments, and there is a real need for new investment fields. Prudent business policy alone will tend to restrict the total amount of investments having the risks inherent in complete ownership with the necessity of asking college boards of trustees to determine policies for profit producing enterprises.

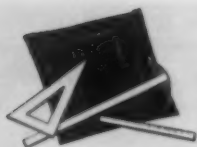
FORESEE CONTINUED DEVALUATION

Many college administrators believe the proportion of equity investments in their endowment portfolios must be raised. They reason that currency controls and manipulations throughout the world will continue or perhaps will be accelerated in the efforts of nations to achieve balanced economies. They foresee in the United States continued devaluation of money by informal, if not formal, means. As their logic leads them to make larger stock investments, they seek new methods to protect their institutions from risks that accompany increased direct participation in business operations. For some, the creation of income stabilization reserves and reserves against principal losses may open the way to larger investments in common stocks.

For protection during any period of reduced dividends, such reserves should be invested in government bond and cash balances since these may be expected to increase in relative value during a period of business depression. Study and revision of management policies may add to benefits from increased investments in common stocks. A provident attitude toward the future must be weighed against opportunistic use of income and principal resources.

Cash Control . . .

in the cafeteria may mean the difference between an efficient and self-supporting enterprise and one which finds itself consistently "in the red" on the balance sheet. Ibbie Jones of Alabama Polytechnic Institute will tell in the June issue how she sets up control procedures to reduce losses.



THE INHERENT INGREDIENTS OF THE problem of space utilization on the Minneapolis and St. Paul campuses of the University of Minnesota can be summarized in this way:

At the end of the second week in the fall quarter of 1948, 25,343 students were enrolled in the following colleges on the Minneapolis campus: (1) science, literature and the arts; (2) institute of technology; (3) college of medical sciences; (4) college of education; (5) school of business administration; (6) college of dentistry; (7) law school; (8) college of pharmacy; (9) general college; (10) university college; (11) library instruction, and (12) graduate school; and on the St. Paul campus, in (1) college of agriculture, forestry and home economics, and (2) school of veterinary medicine. These students were seeking 74 kinds of degrees and were enrolled in 3100 different courses, undergraduate and graduate, in part required and in part elective.

The classes related to these courses met in 221 general purpose classrooms and 188 special purpose classrooms (laboratories).^{*} These course classes varied from one to 12 hours per week and were scheduled from one to six days during the classroom week, which week extends from 8 a.m. to 6 p.m. Monday through Friday, and from 8 a.m. to 12 noon on Saturday. Between classes the students sought to use the libraries and reading rooms, and a majority of them sought to keep some part of the day free for outside remunerative work. These students were instructed in the classroom and supervised in the laboratory by 850 professors, 550 instructors, and 600 teaching assistants and medical fellows, part time and full time.

The housing ideal of the professional staff is a private office, more particularly a private office adjoining the classroom or laboratory, and the schedule goal is to have all formal classes scheduled between 9 a.m. and

12 noon on Mondays, Wednesdays and Fridays. This ideal is not unusual—it is more or less traditional. There is also something more to it than mere academic idiosyncrasy. We expect of the professorial staff productive scholarship, and scheduling of adequate blocks of unbroken time becomes an important factor in achieving this. Accordingly, the scheduling ideal cannot be peremptorily brushed aside; it must be considered, for there still exists high mobility for talented members of the instructional and research staff.

It is small wonder that out of this witches' cauldron of space utilization ingredients the cold statistical figures do not look right. They never will look right when compared with factory space utilization, but we do need to keep in mind that factory workmen do

leges and departments with separate buildings showed unprecedented willingness to relinquish complete control and to centralize responsibility for room assignments in order that their own room needs might be more adequately met. The long-hoped-for opportunity was literally hurled at us. The traditional college and departmental independence and prerogatives were waived, and the function of central administration in this respect was shifted from the analysis of reported utilization statistics and the criticism of them to almost complete clearance and control of room use. Under force of necessity these were some of the things that we did in this situation.

To the limited extent that room scheduling was previously a central administrative function, it had been ex-

SPACE UTILIZATION *worked out*

not decide every three or four months what among thousands of things they are going to make, where they are going to make them, and when they are going to make them.

We could have a much improved showing of space utilization if we made each college self-contained as to space, staff and curriculum; if each college had a fixed and frozen curriculum, and if the college recruited only members of the instructional and research staff who were willing to submit to rigid discipline. Under such conditions space utilization statistical figures might look thoroughly respectable, yet the over-all cost certainly would be greater and the educational qualifications of our graduates would be narrowed decidedly.

The postwar enrollment bulge gave us at Minnesota our first real opportunity to deal centrally with this space utilization problem. In less than a year enrollment skyrocketed from 12,000 to more than 27,000, some 80 per cent beyond our prewar fall quarter peak of approximately 15,000 students. There was no money for new buildings and no time to build them, even though there had been money. Col-

lapsed by the physical plant department. Actually, that department in large measure merely accumulated information and statistics on building, room and station use filed by the several colleges.

This no longer was adequate to meet the new situation. It was our conclusion that inasmuch as class schedules were the responsibility of the college and would continue to be the responsibility of the college and the department, room scheduling most appropriately could be centralized in the office of the dean of admissions and records. Such a room scheduling unit was established in that office with a supervisor and clerical assistance.

SCHEDULES SUBJECT TO CHANGE

Colleges and departments establish class schedules and room use schedules. These are submitted to the room scheduling office and are subject to tabulation and change by that office. When the federal government provided temporary buildings, the complete scheduling of these buildings and room assignments therein was undertaken by this newly established office. To carry out its responsibilities effectively the

From a paper presented before the convention of the Central and Western Associations of College and University Business Officers, Denver, 1949.

^{*}Excludes hospitals, gymnasiums and so forth.

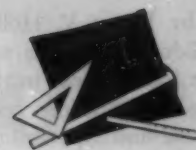
room scheduling office has gradually moved in the direction of taking over directly all space in new and temporary buildings.

As the transition progressed, emphasis soon shifted from the location of unused available rooms to fitting the classes to rooms of appropriate size. Special forms are provided to departments for reporting their class schedules and tentative room schedules, and another form is provided for notification of changes. There are also forms for special room reservations and for final examination assignments. All non-classroom space assignments are handled directly by the supervisor. For the most part, the office deals directly with departments but deans are consulted on all but minor space adjustments. Rooms other than classrooms are as-

office should also be ex officio a member of the building committee.

We have found, for example, that the accumulated data of the room scheduling office with respect to such things as class size and number of classes are most valuable in determining what rooms, and of what size, are most in demand, and hence need to be incorporated in any new structures. There is no point in providing large classrooms to seat 300 students if the data reveal that space of this type already is available, while rooms to hold classes of 35 are in great shortage. In this way we hope not only to fit needs to the building but in each building to endeavor to meet all the needs of the university.

As a possible help to some who may be struggling with this problem, I



lieve, is a minimum. This space will subdivide about as follows on a per student basis:

Space	Sq. Ft.
General classrooms	25
Special classrooms	35
Offices	19
General and storage	14
Library and reading	18
Research	24

General Classrooms. Rooms adapted to general use by classes from all colleges, including lecture, recitation, demonstration, and seminar rooms.

Special Classrooms. Rooms not readily adapted to use by classes from all colleges. In order of decreasing adaptation, they include (1) special purpose classrooms (closely allied to general classrooms); (2) drawing rooms and studios, and (3) instructional shops and laboratories.

Staff Offices. Rooms housing professors, instructors, teaching assistants, fellows and departmental secretarial and clerical help.

General and Storage. Rooms such as media rooms, storerooms, preparation rooms, maintenance shops and laboratories, and office workrooms (which do not house personnel).

Library and Reading. Rooms for reading, workrooms, storerooms, stacks and offices, including such areas in the colleges.

Our study of these areas in square feet indicates that our shortage is most acute in terms of library and reading rooms, general and storage areas, and staff offices.

We have set as our objective a 40 hour week use of classrooms. Classes, however, are scheduled over a 54 hour week. The 40 hour week in the light of industrial use is not an unreasonable objective. On this basis the percentage of use in the winter quarter of 1947 was 66.8 per cent for classrooms and 38.1 per cent for student station hours, i.e. seats in those rooms. We feel that these uses are reasonable in terms of the whole educational objective.

Our building program as projected calls for a gross area of 155 square feet per student. Even this objective is modest, in terms of the 182 square feet

at Minnesota may serve as a general guide

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signed to departments and reassigned by them to staff members. There is still some residue of the old provincial thinking, but gradually the general impression is being spread that departments are custodians of space rather than proprietors of it. The desire is for a two-way flow of information and understanding between faculty and the central office. We have used the common device of an advisory committee to outline and bolster general and special space decisions.

SET UP BUILDING COMMITTEE

Some new buildings are on the way. It is our practice in this connection to establish a building committee for each building to work with the architect designated by the regents. This building committee consists of the university advisory architect, who is also head of the school of architecture, but in his advisory architect position part of business administration, as chairman; the supervising engineer, also as an ex officio member, and three or four of the college or departmental staff involved. This committee consults with the room scheduling office. It is possible that the supervisor of that

shall review briefly prewar, present and hoped-for instructional and research areas.

The fall quarter enrollment at the end of the second week in 1939 was 15,122 and the instructional and research gross areas totaled 2,414,237 square feet, or 159 square feet per student. The term "instructional and research areas" includes classrooms, staff offices, laboratories and library and reading rooms, together with related corridors, stairways, toilets and the like.

The fall quarter enrollment at the end of the second week in 1948 was 24,843 and the gross area for instruction and research was 2,542,215 square feet, or 102.3 square feet per student.

This, we believe, is substandard. It is true that we are operating, but we are using many facilities inadequately lighted and ventilated and overcrowded. The instructional and research space under construction or authorized totals 727,000 square feet; when completed it will increase total instructional and research area to 3,236,815 square feet, or 134.9 square feet per student on the basis of an enrollment of 24,000. This, we be-

projected by Ernest V. Hollis of the Office of Education in his study on a nationwide basis. Those in the service of land-grant institutions will readily recognize the incomparability of our situation with an institution like Northwestern. Agriculture obviously requires research areas far beyond those needed in arts colleges and professional and technological schools.

Minnesota's experience can serve only as a general guide to other institutions, for there is wide variance among institutions in general, in college and departmental organization, in courses offered, in the relation between general and special classrooms, as between instruction and research, as to staff ranking, and in many other respects.

As far as possible there should be centralization of the responsibility for space utilization; careful study based

upon centralized administrative experience, and standards and objectives set in the light of the institution's experience and need. In planning additions, consideration beyond the particular needs of the college or department being housed should be taken fully into account. Ineffective use is almost invariably the result of failure to analyze and study the problem.

STAFF MAN'S VIEWS

Under central guidance and stimulation it is good even for the staff member to review his objectives in terms of space. Of course, the needs of the individual staff member should be given every reasonable consideration. It is for this reason that we encourage departments to initiate and participate in room use scheduling. Even after giving consideration to individual and departmental needs and

objectives, reasonably good scheduling of room use is possible, for often needs complement each other, if not within a department at least between departments, and often study and review reveal that many rooms presumably specialized for a single purpose can be used for other purposes.

Space utilization is only one element of the educational process. It should receive attention but not undue emphasis, for of itself space alone is not productive. Space exists for staff, for students, for instruction, and for research. Space is a means to an end, not an end in itself. We should seek improvement but not beyond that consistent with our educational objectives of training and more knowledge. In this, like most problems with which he deals, the good business officer needs to look beyond the purely business implications of the college.

Survey of Building Costs Conducted by College and University Business

College	Function of Building	Type of Construction	Total Cost	Total Cubage	Cubic Foot	Contract Cost for			Approximate Wage Rate					Date of Contract
						Gen. Construction	Heating, Plumbing	Electrical	Electricians	Bricklayers	Masons	Plumbers	Carpenters	
Univ. of Wash.	Music	Class A, reinforced concrete, brick exterior	\$1,650,000	1,003,505	\$1.65	\$1,099,226	\$283,240	\$74,671	\$2.26	\$2.36	\$2.36	\$2.50	\$2.06	Aug. '48
Univ. of Wash.	Fisheries	Class A, reinforced concrete, brick exterior	1,017,533	981,738	1.04	546,855	272,067	73,984	2.26	2.36	2.36	2.50	2.06	Oct. '48
Knox College	Gymnasium and Swimming Pool	Brick, reinforced concrete & steel	596,132	1,044,500	0.58	596,132	Lump Sum Contract		2.10	2.37	2.37	2.25	2.00	Dec. '48
Concord College	Science	Concrete footing and walls, reinforced with steel	313,922	433,000	0.72	242,636	47,122	24,164	1.62	2.50	2.50	1.62	1.50	Nov. '49
Univ. of Mich.	Men's Residence	Reinforced concrete	4,167,893	3,500,000	1.20	2,639,000	1,012,875	157,500	2.60	2.82	2.82	2.50	2.32	Dec. '48
Chico State	Science, Music, Speech Classes	Reinforced concrete, brick veneer	678,000	719,982	0.94	397,405	\$67,738 \$30,538	45,417	2.50	2.81	2.81	2.50	2.17	Nov. '48
Madison Coll.	Dormitory	Exterior walls, stone; interior, bar joist	355,400	408,600	0.87	300,800	18,000 25,000	11,600	1.50	2.00	2.00	2.25	1.35	Sep. '49
Univ. of Colo. (Med. Center)	Cancer Research, Labs. and Offices	Brick, concrete	464,000	445,400	1.42	353,114	83,089	(included in Gen. Cont.)	2.40	2.50	2.50	2.00	2.25	Nov. '49
Univ. of Colo. (Boulder)	Chemistry Labs.	Stone, concrete	298,089*	344,044	0.87	196,400	74,867	13,986	2.40	2.50	2.50	2.00	1.80	Dec. '48
Central Mich. Coll. of Ed.	Physical Ed. (Field House, Gymnasium, Classrooms, Pool)	Brick, steel	951,343	2,373,000	0.41	719,300	176,876	53,167	2.25	2.50	2.50	2.30	2.00	Nov. '49
New Mex. State Teachers Coll.	Gymnasium	Reinforced concrete, cinder block panels	102,598	356,800	0.29	90,964	8,923	2,710	2.25	2.50	.....	2.25	2.00-2.25	.....
New Mex. State Teachers Coll.	Girls' Dorm.	Reinforced concrete, cinder block panels	174,955	187,800	0.93	140,275	27,971	6,708	2.25	2.50	1.87	2.25	2.00	.....
Texas Technological Coll.	Addition to Administration Bldg., Office and Classrooms	Brick and tile walls, reinforced concrete, stone trim	694,879*	804,000	0.83	498,080	107,765	49,731	2.25	3.25	3.25	2.25	2.00	Oct. '49
Univ. of Miss.	Library	Fireproof concrete, steel, brick and stone	1,050,939	996,700	1.05	594,166	171,000	62,788	2.00	2.50	2.50	2.00	2.50	July '49
Scarritt Coll.	Dormitory	Concrete frame	205,500	163,793	1.25	161,500	33,000	11,000	2.12	2.50	2.50	2.25	1.80	Aug. '49
Scarritt Coll.	Education	Concrete frame	203,793	184,970	1.10	155,793	40,000	10,000	2.12	2.50	2.50	2.25	1.80	Aug. '49
Univ. of Conn.	Dorm. "C"	Precast slab	1,467,912	2,072,577	0.61	910,705	422,207	135,000	2.25	2.50	2.50	2.25	2.10	April '49
Univ. of Conn.	Dorm. "D"	Precast slab	1,387,000	2,508,517	0.54	819,350	417,650	150,000	2.50	2.50	2.50	2.50	2.10	Sep. '49

*Includes architect's fees.

How inflation affected

ACADEMIC SALARIES

PHILIP E. HAGERTY and ROBERT A. QUINN*

Director of Personnel Research and Senior Personnel Technician (Research)
State of New York, Department of Civil Service

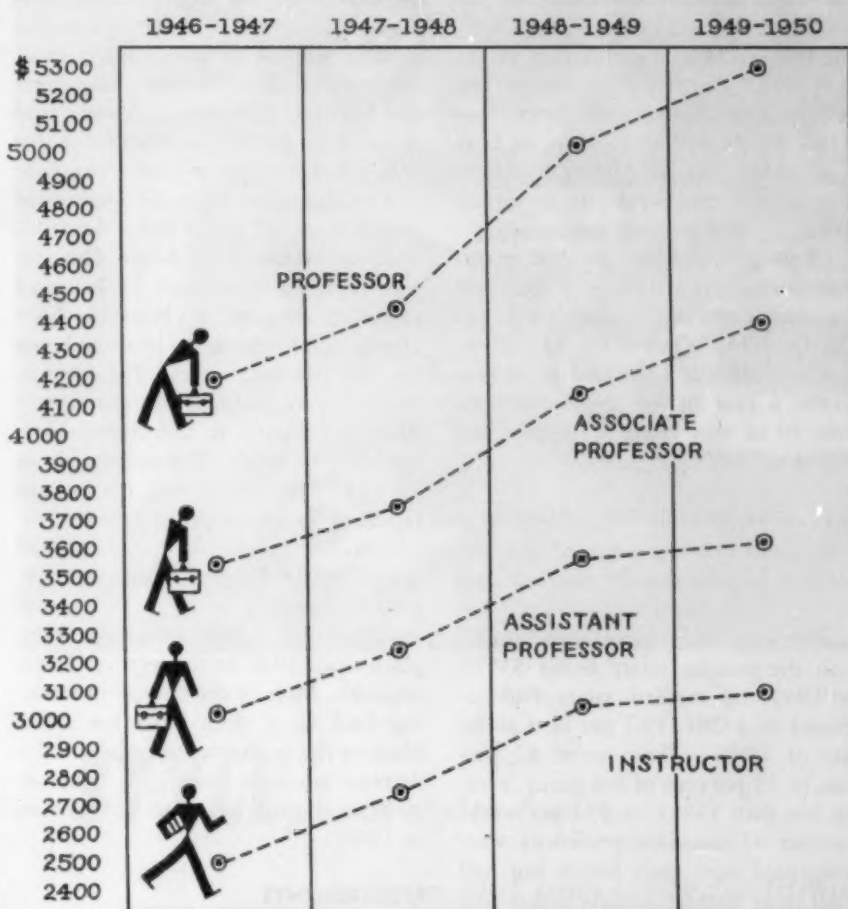
POSTWAR PRESSURES ON THE STRUCTURE of American economy have brought a great increase in the cost of living and four rounds of wage increases for unionized manual workers. Since the same high costs of food, clothing, lodging and other necessities of life must be met by all segments of the population, the living standards of many will be lowered unless their earnings rise along with prices.

To check the salary trends of teaching positions in small colleges, we conducted salary surveys among 16 colleges located throughout New York State which have enrollments of from 278 to 2205 students, and teaching staffs of from 41 to 110. Each scholastic year since 1946-47 the business officers of these colleges have furnished salary rates on each member of the teaching staff by academic title, minimum educational and experience requirements for each level of position, and classroom teaching hours.

The sample of 16 colleges has remained constant for the four-year period and is a typical cross section of small colleges in New York and other large states of the country. Because of the constancy of sample, large number of cases, detailed analysis of data, and long period of the study, the statistics presented have a high validity and thus should be of value to college administrators generally.

The number of positions in the study has gradually increased from 907 in October 1946 to 1158 in October 1949. Percentage-wise this increase has been slightly greater than the total increase in enrollment in all the colleges during the same period. In the current year salary rates were collected on 346 instructors, 329 assistant professors, 189 associate professors, and 294 pro-

*This article expresses the opinions of the authors and may not be construed as reflecting the views of the New York State Department of Civil Service.



Median Salaries of 1158 Teaching Positions in
16 New York State Colleges From 1946 to 1949.

fessors. For convenience in handling the great mass of data, the accepted statistical measures of medians and interquartile ranges have been adopted for this study.

INSTRUCTORS' SALARIES

In 1946 one-fourth of all the 257 instructors were paid less than \$2278 for the academic year and one-fourth were paid more than \$2803, with the median salary being \$2497. In 1949 the median salary had increased to \$3055, or 22.3 per cent above that of 1946. There were 86 persons, or 25 per

cent of this group, earning less than \$2893 per annum, or \$55 per week! Another 86 instructors were being paid more than \$3291 but half of all those holding positions in this title were being paid from \$55 to \$63 per week on an annual basis. Of the 22.3 per cent increase in median salary, only 0.8 per cent occurred between October 1948 and October 1949. In the current scholastic year, instructors' minimum starting salaries varied from \$2300 to \$2800, with the average offer of \$2583 per year, an increase of \$134, or 5.5 per cent above 1948 starting salaries. Thus,

although starting salaries have increased in the last year, the median salary for the whole group has remained almost stationary. Only three out of 346 instructors were paid more than \$3700 a year in 1949.

ASSISTANT PROFESSORS' SALARIES

In 1946 one-fourth of all the 226 assistant professors were paid less than \$2682 for the academic year and one-fourth were paid more than \$3276, with the median salary being \$3041. In 1949 the median salary had increased to \$3624, or 19.2 per cent above that of 1946. There were 82 persons, or 25 per cent of this group, earning less than \$3420 per annum, or \$66 per week! Another 82 assistant professors were being paid more than \$3881 but half of all those in the positions in this title were being paid from \$66 to \$75 per week on an annual basis.

Of the 19.2 per cent increase in median salary since 1946, 3.4 per cent occurred between October 1948 and October 1949. Only 5 out of 329 assistant professors were paid more than \$4400 a year in 1949. At the same time 10 of this group were paid less than \$3000.

ASSOCIATE PROFESSORS' SALARIES

In 1946 one-fourth of all the 156 associate professors were paid less than \$3114 for the academic year and one-fourth were paid more than \$3817, with the median salary being \$3577. In 1949 the median salary had increased to \$4281, 19.7 per cent above that of 1946. There were 47 persons, or 25 per cent of this group, earning less than \$3863, or \$74 per week! Another 47 associate professors were being paid more than \$4608, but half of all those in the positions in this title were being paid from \$74 to \$88 per week on an annual basis.

Of the 19.7 per cent increase in median salary since 1946, 4.6 per cent occurred between October 1948 and October 1949. The variation in salary rate is wide in this title; 6 incumbents got less than \$3300 and only 7 of the 189 in positions reported under this title were paid more than \$5200 per annum.

PROFESSORS' SALARIES

In 1946 one-fourth of all the 268 professors were paid less than \$3533 for the academic year and one-fourth were paid more than \$4564, with the median salary being \$4182. In 1949

the median salary had increased to \$5207, or 24.5 per cent above that of 1946. There were 73 persons, or 25 per cent of this group, earning less than \$4265, or \$82 per week! Another 73 professors were being paid more than \$5765, but half of all those holding positions in this title were being paid from \$82 to \$111 per week on an annual basis.

Of the 24.5 per cent increase in median salary since 1946, 4.7 per cent occurred between October 1948 and October 1949. The variation in salary rates is very wide in this title, as would be expected. The higher salary rates for the group reflect long seniority as well as increased abilities and responsibilities. Eighteen of the incumbents got less than \$3800 and 17 were paid more than \$6500 per annum of the 294 positions reported under this title.

The classroom hours for instructors varied from 12 to 15 hours in 1949, with the average $13\frac{3}{4}$ hours. One college reported more than 15 hours of classroom assignment. There has been almost no change in the average hours for the last four years. The average hours for the assistant professors have decreased slightly to the present average of $13\frac{1}{2}$ hours. The range is from 12 to 15 hours, with only one college reporting in excess of 15 hours.

Associate professors are assigned from 11 to 15 hours of classroom work, with the average being slightly more than 13 hours. Little change has taken place since 1946 in the average hours required. Most of the change in teaching load on a clock basis has taken place in the professors' schedules. The decrease has been from $13\frac{3}{4}$ hours in 1946 to slightly less than $12\frac{1}{2}$ hours in 1949.

REQUIREMENTS

In 1946 less than one-third of the 16 colleges required a master's degree for appointment as an instructor. Three years later requirements have been tightened so that more than half of the colleges now require the M.A. or its equivalent. Ninety per cent of the colleges believed that no previous teaching experience was necessary for appointment as an instructor. This view has remained unchanged since 1946.

Four colleges required Ph.D. degrees for appointment to assistant professor positions in 1946. By 1949 the number of colleges requiring Ph.D.'s for this title had increased to 6, with several others preferring the Ph.D. but accepting equivalent education and ex-

perience. The teaching experience showed a slight decrease from an average of 3.3 years required in 1946 to the 2.6 years currently required.

The professional requirements for appointment to positions of associate professor also were increased during the three years covered by this study. More than three-fourths of the colleges now require Ph.D.'s, whereas in 1946 that degree was required by only half the colleges. The average amount of teaching experience required was increased from 4.4 years in 1946 to 5.1 years in 1949. The educational and experience requirements for appointment to positions of professor remained the same from 1946 to 1949. In addition to the Ph.D. degree, an average of eight years of teaching experience is required.

CONCLUSIONS

The salary rates in the colleges studied have increased steadily, although somewhat unevenly, over the four postwar years. The greatest increase in starting rates has taken place at the instructor level, as would be expected. There has been a definite narrowing of the ranges of the middle 50 per cent of the salaries for the instructor, the assistant and associate professors. Although not conclusive, this seems to indicate that salary increases accompany promotions in title and that stratification in salary ranges is gradually paralleling stratification in academic rank. These generalizations do not hold for the professor level because of two somewhat opposing forces, viz. lack of further promotion opportunities and theoretical ceilings on faculty salaries because of college finances.

Teaching schedules have remained relatively constant over the period, with the largest decrease being three-fourths of an hour per week for the professors. Professional preparation requirements have been increased for the three lower-level positions and kept at the previous high level for the top position. Previous teaching experience as a prerequisite has been relaxed for the title of assistant professor only.

The foregoing conclusions are factual from the data collected in this intensive survey. Further extension of these conclusions in an attempt to prove that the salary levels are inadequate is not warranted without further consideration of many other related factors that enter into the determination of whether compensation for particular positions is correct.

The serpentine south side of the new residence hall at Massachusetts Institute of Technology. The dining room is in the white stone section of the building.

THE CHOICE OF A STYLE FOR OUR school buildings is ceasing to be an issue. As more and more institutions erect modern structures, it becomes apparent that styles as we have known them are superficial mannerisms, and that "style," the expression of life found in good buildings of all ages, can be achieved only as a resultant. Once the idea is grasped that style is not an objective but a *result* of architectural design, we shall see that our problem becomes one of achieving a good modern building, not one of creating something that is easily classifiable as belonging to a certain period of design.

Nevertheless, some colleges and universities still have yet to face up to the problem of whether their next buildings will be executed with a historical veneer or designed by their architects to take full advantage of present building developments, and, by their art, to fuse these material means with an expression of the aims and character of the institution the building serves.

Every building tells the story of its makers. The buildings of an individual or a nation are its clearest record. So, too, do college buildings expose the wisdom and faith of each succeeding administration and those who serve it. There are buildings that reflect a belief that the best already has been accomplished; those that give a bow to contemporary things and modify the forms of the past to get a little of the best of all ages, and there are a few (but a growing number) that affirm their faith in the future and indicate that life and building are opportunities to be faced each day. Such structures say that the principles underlying all successful building in the past are to be applied to today's possibilities; that while the basic premises of life may be unchanged our means expand in such a way that to-



STYLE, *not styles for* *college and university buildings*

RICHARD M. BENNETT

Loebl, Schlossman and Bennett
Architects and Engineers
Chicago

Style is not an objective but is a result of architectural design. The problem is one of achieving a good modern building, not one classifiable as belonging to a certain period.



Administration building and interior of chapel, designed by Frank Lloyd Wright for Florida Southern College



day's solution cannot possibly look like yesterday's.

As we, as a nation, pass from being an eager, acquisitive, competitive country to our destined rôle as the foremost world power standing for the dignity and freedom of individuals, our leaders in every field are engaged in decisions that will make ours a dynamic, generous, broad culture reflecting infinite faith in the future or set us up as the guardians of the past.

moralizing of the problem, but we must also consider some of the relatively tangible factors, such as economy; the authority of well known architects; "acceptance," or what others are doing; the fear of being "dated," and tradition.

MORE FOR A DOLLAR

Years ago we used to say the modern architecture was cheaper. That was bad selling, because no one wants

Whenever such men have built buildings with skill and pride in them, buildings that accurately reflect the spirit of their times, any difference of principle must be accompanied by a respect for their accomplishments and their sincerity.

The number of such architects is dwindling. Their philosophy was gained in schools that now turn out graduates incapable of doing a stylistic building. These were gallant men, men



Modern fireplace in the main lounge of M.I.T.'s newest residence hall, officially opened on alumni day last June, is a center of student social activity.

In college planning, this issue might be the choice of creating an environment of openness, of inquiry and expanding vitality or the perpetuation of a tradition of ponderous monuments to past glory.

An architect stands for more than a designer of buildings. When the modern architect proposes his type of building he is also suggesting a policy for the institution it serves; he is saying that the lessons of the past applied dynamically to the problems of today will make the solving of the future easier for the generation being taught. What really has been said so far is a

a cheap building. Today all buildings cost a lot, but we can safely say that modern design can give more for the money. Sometimes that is not the prime objective, but it is seldom that money spent on the best materials and added amenities is not more wisely used than if it procured hand carved stone and correctly reproduced decorative detail.

MODERN ARCHITECTS

There are fine, sincere architects who steadfastly maintain that certain specific architectural styles enjoy a monopoly on a commodity called beauty.

who deserve far more respect than do those who say, "We do modern, too." For there is a type of architect who copies modern forms even as he copied antique ones, who is not concerned with the inner principles of his buildings but obligingly surfaces a structure as desired.

A word is in order for some great architects who have faced the reality of designing for universities where a donor's will has stipulated a specific style of architecture. Accepting the limitation, they have undertaken the task as they would undertake placing a building on a difficult site. Some-



Rooms in M.I.T.'s new residence hall overlook the Charles River Basin and are furnished with modern natural-finish furniture, much of which is built in.

how, they provide a sort of label which they work into a building and which is sufficient to establish the name of the style, but the label gets in the way of realizing a contemporary building as little as possible. The real problem in such cases is to prevent trustees from accepting gifts that establish that kind of restriction.

Times change, and today a survey of the leading architects would show the vast majority of them in favor of modern buildings, even though there might be a wide latitude in their evaluations of a modern building.

GAINS WIDE ACCEPTANCE

Once there were institutions that could not build a modern building because our older colleges and the British universities didn't have that sort of structure. Today there are modern buildings at foreign universities. Harvard has a new modern graduate school; Yale plans for a modern art gallery wing; everywhere there are modern college buildings from M.I.T.'s new Aalto residence hall to Wright's whole college at Lakeland, Fla. Most of these institutions had strong policies for styled buildings, policies that have been abandoned in recognition of

the vitality and integrity of the modern movement in architecture.

BUILDINGS ARE "DATED"

The amusing argument sometimes is heard that modern buildings will look dated, and that while they are, so to say, morally correct, one should wait until the style has crystallized before embarking on it. The answer to that is that every building is dated. A good architectural critic can place within a few years any building he sees. As for dating, why fear that when the objective has so often been to obtain a result that looks 500 years old? Is 1950 something to be ashamed of? It certainly shouldn't be.

Finally, the commonest of all arguments leveled against a modern building has been the necessity to maintain "our tradition."

Because a school has its present buildings all of one style, it is thought that all future buildings should retain the same mannerisms. Actually, some of the most beautiful campuses have been enriched by a variety of styles that clearly tell their growth. As for the supposed beauty to be found in unanimity of style, just remember Chartres Cathedral. We spend fortunes

sending students to Europe so they can venerate its great façade which is flanked by both a Romanesque and a Gothic tower!

What tradition should we follow? Colonial or Georgian? None of our expanding colleges maintained such a tradition even when it was founded in our Colonial period, and none started as far back as real Gothic. Gothic? Our revival of this style is a mere 60 years old.

TRADITION IS DEVELOPMENT

An examination of our architecture fails to reveal any sustained style of building. Our great tradition is development, improvement. Our development often is dismissed as mere change from one style to another because too often we have emphasized the superficial, the applied ornament, in our evaluation of our accomplishments and have failed to give credit to our real contribution to architecture.

Our pursuit of styles has prevented a concentration on our real task—that of making an organic, living whole out of our control of material things in the same spirit that must underlie our faith in our *own* way of life, a faith we let out in the open so little.

THE TASK OF PLANNING A STUDENT union is one that involves countless details and, therefore, much time and patience. The key person around whom the planning should revolve is the individual who ultimately will be the director of the union. He should be on the campus from the beginning, or at least before the architects do any preliminary work.

This point cannot be overemphasized, for the director should be the one person with the prime responsibility of following up on the details and for carrying the thinking from one committee or office to another. Further, many decisions that were made for good reason at the time may bring up questions later, and the director should know the reasons for the decisions, for after the building is under way or is completed he will be the person who will have to justify the thinking as it developed and congealed.

I hold no particular brief against the committee system but admittedly, at times, it can be cumbersome and slow in its operations. Many times during the preliminary stages a quick decision is going to have to be made, and somebody is going to have to make it. Time may not permit the planning or policy committee's being called together, and so the director's value is enhanced again, for he can give the answer and keep the project moving. To plan and construct a union building means considerable effort on the part of many persons, and a union director on the job from the beginning will justify his salary many times over.

Each university is interested in having its union as close to perfect as possible, though each building will be different because of local circumstances and conditions. However, some elements normally should be included to ensure a well rounded union from the point of view of both program and income.

In visiting college unions, both director and architect should spend a reasonable amount of time in each place. Too often the tendency is to walk into a union in the morning and leave in the afternoon, and expect to learn all about it. During a somewhat longer visit the architect will learn some of the shortcomings of the building from a functional point of view. When our architect toured the union field he observed that if at all possible the games area should be ar-

ranged so that one control desk would be sufficient. As a result, our bowling alleys, billiard tables, and table tennis were so arranged. Over a period of years considerable saving in time and money will result from this one feature.

Another important item to consider when planning a union is the employment of someone who can advise professionally from an architectural and interior decorating point of view. A person so qualified will be worth his services many times over. In order to help prove the point, I cite Oregon's experience. About three months before we sent out for bids, our union called for three elevators: one passenger and two freight. In checking the proposed plans our professional adviser pointed out to us how one of the freight elevators could be eliminated; as a result, we saved more than \$20,000. The fee for such advice was about \$200.

CHOOSING THE SITE

An additional suggestion that merits mention is the location of the building. A complete study of student traffic on a campus should be made, and the union located close to the center of traffic. In so doing, the program and income of the building will profit accordingly. Future expansion of the building also needs to be considered when choosing the site.

After the site has been chosen, the union director has been appointed, the campus planning committee has decided in a general way what facilities it wants in the building and what services the union is expected to perform, the architect has been appointed and some preliminary work on his part has been accomplished, one should then stop to consider whether there is enough money on hand to build the building. There is not much sense

in going any farther until that point is settled. Many institutions make the mistake of getting the architect started on an approved plan only to find that the wherewithal just is not there.

Consider the architect. It is unfair if he accomplishes much work and study, which may involve quite an expenditure of money, only to be informed that much of what he has done must be refigured or modified because the basic plan could not be financed. In all probability, it will take longer than expected to get a bid on the building so the administration of the college should not make public commitments as to the actual construction date. Once the project has been turned over to the architect, he must be given sufficient time to complete his work in orderly fashion.

When it is time to ask for bids, one should make a serious effort to finance a complete building rather than leave any large areas unfinished or unfurnished. Unfinished areas stay unfinished much longer than planned. Of course, the importance of having some alternates is understood, but insofar as possible the college should attempt to get a complete structure.

In some sections of the country a premium will be paid if the contractor starts his work in the early part of the fall when he realizes that the winter is ahead and the project may shut down for a period of time because of bad weather.

Excellent services exist through the Association of College Unions for those who wish additional details and advice on planning a union building. The main points, however, are (1) to employ the union director early; (2) not to commit yourself to a detailed time schedule; (3) to employ a professional adviser, and (4) to be realistic about how much money is available to do the job desired.

STUDENT UNION

R. C. WILLIAMS

Director, Student Unions
University of Oregon

Undesirable room has become modern laboratory for

INDUSTRIAL ARTS

THE INDUSTRIAL ARTS TEACHER education laboratory at North Carolina State College is one of the most attractive and best organized of its kind in the Southeast. It is an example of what can be done with a large ground-floor room with unpainted tile and brick walls, a concrete floor, a plank ceiling covered with a network of plumbing and heating pipes, and with inadequate lighting.

This room was undesirable from the standpoint of physical appearance, and its facilities provided for a narrow and limited program. In 1947, largely through the efforts of Dr. John R. Ludington, then head of the industrial arts department, this room, approximating 3500 square feet of floor space, was completely remodeled into a modern general shop or industrial arts laboratory. Provisions were made for teaching areas in drawing and planning, graphic arts, general woodworking, general metalwork, electricity, radio, auto mechanics, ceramics and crafts.

A study of the floor plan shows the arrangement of these areas. Walls of

plate glass and asbestos sheet separate the drawing and graphic arts areas from the rest of the shop. This eliminates noises and dust, yet provides clear vision in all parts of the shop. The floors in all but the metals area are covered with marbleized asphalt tile, and the false ceiling 2 feet below the original ceiling is of acoustic tile and covers the maze of plumbing. This also makes possible flush fluorescent light fixtures. The painting throughout, including walls and machines, was done in accordance with modern principles of color dynamics.

HIGH SCHOOLS, PLEASE COPY

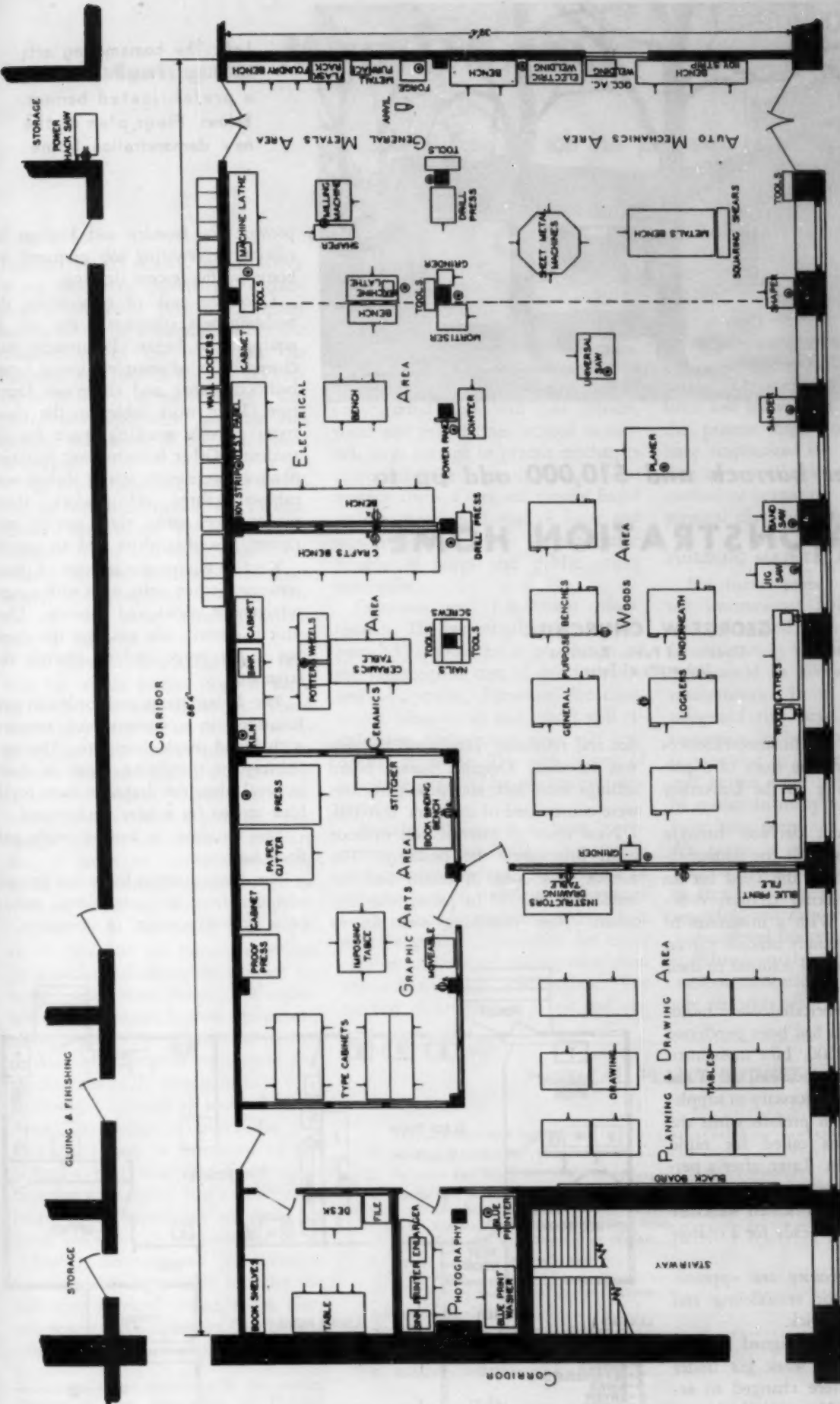
This remodeled shop or laboratory with scientific color schemes, fluores-

cent lighting, sound absorbing ceiling, resilient tile floor, and well organized areas representing modern industry provides a standard which, it is hoped, will be used by the hundreds of public high schools throughout the state.

With the general acceptance of the orientation and exploratory function of industrial arts, along with consumer education and avocational interests, it becomes necessary to adjust, revise and remodel physical facilities, such as rooms and equipment, in order to depart from the narrow and restricted shops of the old manual training program. Teachers, administrators and architects must plan industrial arts laboratories from the standpoint of student needs and experiences.



A view of the industrial arts laboratory at North Carolina State College showing the woodworking area in the foreground. The drawing and planning, ceramics and electrical areas can be seen in the background.



THE INDUSTRIAL ARTS LABORATORY NORTH CAROLINA STATE COLLEGE

LEGEND
DOUBLE WALL OUTLET: Ⓢ
FLOOR OUTLET: Ⓢ
SCALE: 1/4" = 1'-0"



Left: The homemaking arts building remodeled from a prefabricated barrack. Below: Floor plan of the new demonstration home.

Former barrack and \$10,000 add up to DEMONSTRATION HOME

GEORGE W. CHURCHILL

Director of Public Relations
University of Tulsa

FROM BARRACK TO DEMONSTRATION home is, in short, the story of a prefabricated building on the University of Tulsa campus.

When a recent decision brought about the expansion of the homemaking arts curriculum, the need for an enlarged homemaking laboratory became apparent. With a minimum of hair tearing, university officials hit on a simple and practical solution to their problem.

A vacant prefabricated office building on the campus had been purchased when new for \$5500. Like most institutions of higher education, the Tulsa university found it necessary to supplement facilities with prefabs when the influx of veterans called for rapid building expansion. Later, after a permanent building was completed, the 67 by 27 foot prefabricated structure was unoccupied and ready for a change of character.

A dash of ingenuity and approximately \$10,000 for remodeling and equipment did the trick.

Floor plans were designed for the frame structure and work got under way. Partitions were changed to accommodate a living room, bedroom, classroom, laundry room, kitchen, of-

fice and restroom. Hardwood flooring was installed. Original beaver board ceilings were left, and new partitions were constructed of the same material.

New coats of interior and exterior paint brightened the building. The outside was done in cream and the inside was painted in pastel blue and cream. New plumbing went in to

provide for laundry and kitchen facilities. A rewiring job prepared the home for fluorescent lighting.

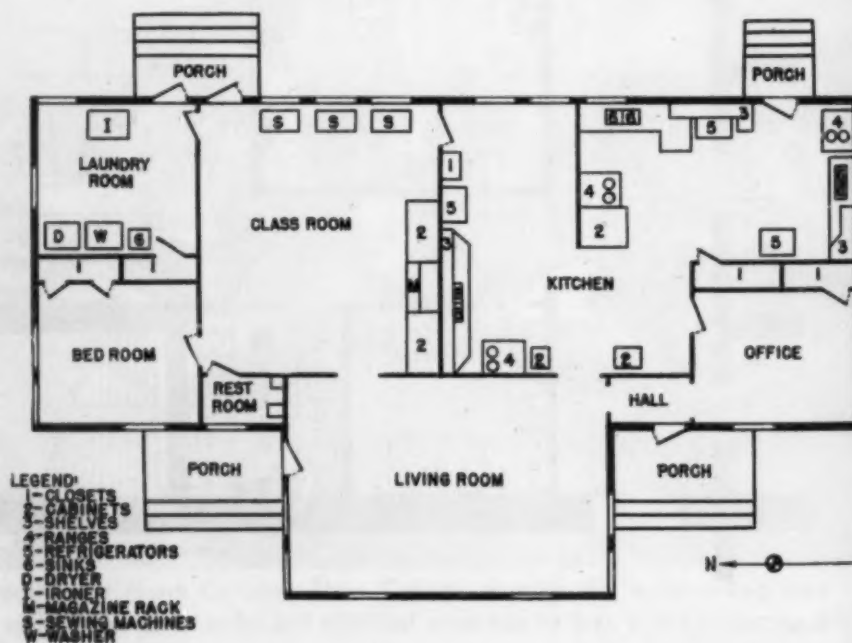
Once the task of remodeling the building was completed, the job of equipping it began. Equipment purchased included complete living room, bedroom, office and classroom furniture. Long work tables in the classroom provide working space for 25 students. Other homemaking facilities obtained were eight sets of shelves and cabinets, three refrigerators, three ranges, seven sinks, three sewing machines, a washer, drier and an ironer.

Kitchen equipment consists of three separate kitchen units, each with range, refrigerator, sinks and cabinets. One unit is electric, one gas, and the third has a gas range and an electric refrigerator.

The living room and bedroom are furnished in a conventional manner with blond maple furniture. The upholstery in the living room is done in royal blue; the draperies have royal blue stripes on a gray background.

The building is heated with gas floor furnaces.

The demonstration home has proved adequate from an instructional standpoint and economical in operation.



Budgeting for **MAINTENANCE**

should be based on present replacement cost

WALTER W. KRAFT

Director, Physical Plant
University of Oklahoma

THE PHYSICAL PLANT DEPARTMENT of any college or university is a complex organization performing many behind-the-scene operations in the management of the institution. Its function is to provide the services necessary to maintain the buildings, furniture and equipment, grounds and utilities in support of the educational program.

The organization and budget allocation problems are similar for all educational institutions. The organization becomes larger and more departmentalized as the institution becomes larger; the problems, however, are basically the same, differing principally in size.

The physical plant budget must provide for certain budget items to carry on its service responsibilities. These items may vary as to title or as to grouping. Each must contain the important item of building maintenance. In order to discuss the building maintenance budget item a physical plant budget for an institution of medium size is given in the accompanying table, the percentage of each item of the total being indicated.

Items 1, 4a, 4c, 5a, 6, 7, 8 and 9 in the table do not present a serious problem in estimating the amount required, since these items cover organizational personnel, known equipment, and supplies. The adjustment change in salaries and cost of equipment and supplies are easily determined.

Streets, Sidewalks and Parking Area: The budget allocation for this item (4b) may be estimated by applying a unit area cost based upon experience or upon unit costs figures based upon experience of cities in street and sidewalk maintenance.

Utility Services and Distribution Systems: This item (5b) includes the following services: steam, water, electric power, gas and sewers. The budget allocation will vary greatly, depending

upon how the lines were originally installed. Overhead power lines will cost a great deal more for maintenance than underground lines will cost. Steam, water and power lines located in tunnels large enough to permit mechanics to work there will greatly reduce maintenance costs. Costs are usually based on the length and size of lines and may be obtained from the experience records of cities and public utility companies.

Furniture and Equipment Maintenance: The budget allocation for this item (3) should be a percentage of the replacement cost of the furniture and equipment. Furniture for classrooms, laboratories and offices will require less maintenance than will residential furniture. The two classes of furniture should be estimated separately.

Building Maintenance: Item 2 represents the largest budget item in the physical plant budget, 28.6 per cent of the total budget. Building maintenance often is greatly neglected, although it offers a greater opportunity for economy in institutional management than any other single item offers. The method of arriving at a fair and rea-

sonable building maintenance budget has been under study for a number of years. The uncertainty of prices of labor and material in recent years and the present high construction level have emphasized the necessity of setting up a workable, easily understood method of preparing this item for the physical plant budget.

BUILDING MAINTENANCE BUDGET

For many years those responsible for institutional buildings have attempted to find some formula or basis for estimating the amount of money that should be allocated for building maintenance. It is not possible to safeguard the large institutional investments in buildings unless money is provided to make repairs properly and at the time such repairs should be made. In many instances buildings have been permitted to deteriorate to the point at which the repair item became a remodeling item. This places a great burden on the budget, is wasteful, and may encroach upon the instructional budget.

Fifteen years ago representatives of various institutions discussed this matter, and the general opinion was that

PHYSICAL PLANT BUDGET

	Per Cent
1. Administration and Engineering.....	7.7
2. Building Maintenance.....	28.6
3. Furniture and Equipment Maintenance.....	5.0
4. Landscape and Grounds:	
a. Grounds.....	8.4
b. Streets, Sidewalks and Parking Area.....	2.0
c. Collection and Disposal of Waste.....	1.2
5. Power Plant and Utility System:	
a. Plant.....	15.0
b. Utility Service Distribution Systems.....	3.2
6. Janitor Service.....	12.4
7. Police and Fire Protection Service.....	10.0
8. Telephone Service.....	3.2
9. Receiving and Inventory.....	3.3
TOTAL.....	100.0

From a paper presented at the annual meeting of the Association of Physical Plant Administrators of American Universities and Colleges, Fayetteville, Ark., 1949.

the building maintenance budget item was not given proper weight in the institution budget. It was evident that many building repairs were made in more or less temporary manner, which contributed to a more rapid deterioration of the building. Often money was allocated for building maintenance after all other money requests had been provided for. In many instances the allocation was based on the amount allocated or used the previous year, regardless of the actual need shown.

PROBLEM COMPLEXING

The problem of determining the amount required for building maintenance did not at first seem difficult; however, as our study continued the problem became more complex. Data from a number of institutions over a period of several years were compiled with the thought that a pattern would develop that might simplify the problem. There were fairly wide differences in those data from different sections. Many buildings on which data had been submitted had been constructed many years earlier and required relatively more maintenance than did more modern buildings. The older buildings in most instances were constructed at a much lower cost per cubic or per square foot. Then, too, buildings of different types differed in maintenance costs. It became evident that buildings would need to be classified as to type of construction and that all buildings would need to be based upon present replacement costs.

Too, it was evident that more information about the buildings would have to be assembled and a record of building maintenance cost recorded in order to establish an experience factor. It also would be necessary to differentiate between maintenance and remodeling and to define building maintenance. The following indicates the steps taken in 1935 to obtain information required to develop a method of determining a building maintenance budget.

1. Information about buildings: (a) year built; (b) original cost; (c) type of building; (d) year and cost of additions built; (e) volume (A.I.A. method), and (f) floor area.

2. Each building was given a building maintenance number.

3. Work orders indicated whether or not the work was a building maintenance charge.

4. Annual building inspections were made for repairs.

5. A record was set up for building maintenance costs.

6. A definition of building maintenance was prepared as follows: Building maintenance includes minor alterations, repair of buildings, cost of materials, hire of personnel, and other expenses necessary for the repair of roofing, painting, masonry walls, foundations, flooring, partitions, doors, windows, plaster, structural iron work, screens, window shades, venetian blinds, plumbing, heating, air conditioning, electric wiring, light fixtures and lamp replacement, and other related items. (Building alterations include cost not to exceed 0.1 per cent per year based on present building replacement cost.) It does not include janitor work, cost of utilities, adjoining sidewalk repair, care of lawns and shrubbery, repair of movable furniture, general restaurant or kitchen equipment, special laboratory equipment, remodeling of laboratory equipment, or maintenance of special utility services to such equipment.

After several years, during which time some revision in procedure was made, we completed a full year of record of building maintenance costs at the close of the 1936-37 fiscal year. This record has been maintained since that time, and we now have accumulated sufficient cost data to enable us to establish maintenance cost factors for the three building classifications.

NO MAGIC FORMULA

There is no magic formula which, when applied, will give a correct and easy answer to the question of how much is to be allocated for building maintenance. A number of varying conditions enter the calculations. Such

conditions when examined over a period of years may be resolved into average conditions. Other factors, such as construction cost indexes, are fairly well established for given areas and may therefore be used with some degree of accuracy. By the use of known building cost factors and by the assumption of certain average conditions, a formula may be developed that will provide an adequate basis for determining the amount of money required for building maintenance.

MAINTENANCE COSTS VARY

Building maintenance for any building will vary considerably from one year to another. Large expenses, such as repointing masonry walls or re-roofing a building, may occur this year and then not again for 10 or 15 years. Costs may vary by reason of light or intensive use. Over a period of, say, 10 years or more, the average cost will tend to approximate a uniform cost maintenance factor for a given type of construction. Building maintenance cost will vary, depending upon the standard of maintenance. We shall consider a standard based on (1) the proper protection of the property from the natural elements, and (2) fair to good interior appearance.

Building maintenance costs have been calculated in various ways: (1) based on an annual rate per square foot of floor area; (2) based on an annual rate per cubic foot of building volume; (3) based on a percentage of the building costs converted to the present costs.

Case 1 (based on square foot area): The method is not generally applicable to educational institution buildings because of the wide range of space re-

EXHIBIT A—BUILDING COST INDEX NUMBERS

Average prices 1926-29 = 100

Year	CLASSIFICATION		
	No. 1 Wood-Frame	No. 2 Masonry-Wood	No. 3 Masonry-Steel Masonry-Concrete
1910.....	50.2	53.3	57.0
1915.....	51.9	55.2	61.0
1920.....	118.8	120.0	121.8
1925.....	99.1	101.9	101.0
1927.....	95.1	100.0	99.3
1929.....	97.2	100.9	99.5
1930.....	94.3	97.9	96.9
1935.....	84.6	86.8	89.2
1940.....	99.6	100.4	105.5
1945.....	145.5	139.1	131.9
1948.....	223.1	212.3	191.9

The foregoing index numbers are derived from studies of relative construction costs for the Oklahoma City area developed by E. H. Boeckh & Associates, Inc., Washington, D.C.

quirements for the many departments and services. Under this method a classroom building would rate as much as a science laboratory, library, museum or hospital. Costs of college buildings vary considerably, depending to a large extent upon the use factor. Science buildings necessitating many utility services or buildings requiring many small rooms will cost more than classroom buildings. The building maintenance cost does not depend upon floor area. The application of the square foot method will not give an adequate maintenance cost comparison.

Case 2 (based on the per cubic foot of building volume): Although this method is more nearly accurate than that based on a square foot of floor area in that it makes an allowance for rooms having high ceilings, such as auditoriums, library reading rooms, and museum exhibit space, it does not overcome the objection shown in case 1. Neither floor area nor cubic volume methods provide for such building differences as indicated in case 1.

Case 3 (based on a percentage of the building costs converted to present costs): Since building maintenance costs and building replacement cost vary in nearly a direct proportion, the maintenance costs may be estimated by taking a percentage of the current building replacement costs. The design or function of the building is reflected in the original cost. Whether the building is a classroom building, a science laboratory, a library, or some other type, its maintenance has a direct relation to its replacement cost. When materials are required for the repair of the building, the costs will be in more or less direct proportion to the replacement cost. The method of basing the building maintenance cost on the replacement cost is therefore used in developing the building maintenance budget formula.

In order to calculate building maintenance costs based on a percentage of the present replacement cost, it is necessary to establish the replacement costs of all buildings under consideration. This may be accomplished by referring to the record of building costs in the area in which the institution is located. Such records may be available from regional offices of building construction associations or from records compiled by building trades publications. If such is not readily obtainable, a survey of building costs in the area required and for the period required may be obtained from competent en-

Method of Calculating Replacement Costs

BUILDING A Date constructed, 1915
Cost.....\$12,000
Classification.....Type 1, frame or wood
Index number.....1915— 51.9
Index number.....1948—223.1

223.1
= 4.29 Differential Factor

51.9
 $\$12,000 \times 4.29 = \$51,480$
(Present Replacement Cost)

BUILDING B Date constructed, 1930
Cost.....\$32,000
Classification.....Type 2, masonry walls
-wood frame and
floors

Index number.....1930— 97.7
Index number.....1948—212.3
212.3

= 2.17 Differential Factor

97.7
 $\$32,000 \times 2.17 = \$69,440$
(Present Replacement Cost)

BUILDING C Date constructed, 1935
Cost.....\$190,000
Classification.....Type 3, masonry-con-
crete frame
Index number.....1935— 89.2
Index number.....1948—191.9
191.9

= 2.15 Differential Factor

89.2
 $\$190,000 \times 2.15 = \$408,500$
(Present Replacement Cost)

gineering offices, organized to render such service.

The construction cost index is a record of the average construction costs for a given area during a given year which is classified as to structural and general use types. The compilation of building cost averages over a number of years are referred to as construction index numbers. In order that comparative figures may be had, some one-year period of prices is taken as 100; all other figures are given in percentage of the base period costs.

Exhibit A, a list of 10 index numbers taken from the survey for the Oklahoma City area for the period from 1910 to 1948, is shown on the opposite page.

Educational institution buildings are constructed for a large range of uses and of various materials. They have been placed in three general classifications, namely, (1) wood frame construction; (2) masonry-wood (wood floors and wood frame partitions); (3) masonry-concrete or masonry-steel

frame fireproofed and concrete floors.

To determine the 1948 replacement cost for a building built prior to 1948, divide the 1948 index number by the index number for the year in which the building was constructed. (Use index number in the proper classification column.) The result is the differential factor which, when multiplied by the original building cost, will give the 1948 replacement cost. If additions have been built to the building, these must be calculated separately and added to the 1948 replacement cost.

The examples to the left illustrate the method of calculating the replacement costs of buildings in the several classifications.

The amount to be allocated for building maintenance for any group of buildings may be determined by applying a maintenance cost factor to the total replacement costs for each classification. The maintenance cost factor is a percentage of the present replacement cost. The percentage used for each building classification is the approximate average of our experience over a period of years. This factor varies for the three building classifications, as the cost per cubic foot for the three types of buildings varies, being higher for the third type than for the second, and higher for the second than for the first.

If we assume that the building maintenance cost is approximately the same for three buildings of identical plan differing only as to type, the maintenance cost factor, being a percentage of building costs, would be higher for the first than for the second, and for the second than for the third.

Maintenance Cost Factors University of Oklahoma

Classification	Factor
1. Wood-frame construction.....	1.75%
2. Masonry-wood construction.....	1.30%
3. Masonry-concrete or masonry-steel and concrete floors.....	1.10%

Assume that the 1948 replacement costs for the several classifications of buildings total as follows and the aforementioned maintenance cost factors are applied to such totals; the result would be the amount required for the annual building maintenance budget, as is shown below.

CLASSIFICATION	REPLACEMENT	MAINTENANCE FACTOR	COST
1	\$ 125,000	1.75%	\$ 2,187.50
2	500,000	1.30%	6,500.00
3	2,500,000	1.10%	27,500.00
Total required for annual building maintenance.....			\$36,187.50

EXHIBIT B—BUILDING MAINTENANCE BUDGET, 1949-50

BUILDING	YEAR BUILT	COST	TYPE	INDEX YEAR BUILT	INDEX 1948	DIFFERENTIAL FACTOR	REPLACE-MENT COST	MAINT. COST FACTOR	BLDG. MAINT.	ADJUSTED USE FACTOR	ADJUSTED BUDGET
Administration.....	1912	\$200,000	3	56.4	191.9	3.40	\$680,000	1.10%	\$7,480		\$7,480
DeBarr Hall (Chemistry).....	1916	180,000	3	66.3	191.9	2.89	520,200	1.10%	5,722	+10%	6,294
Kaufman Hall (Classroom)....	1948	400,000	3	191.9	191.9	1.00	400,000	1.10%	4,400	-75%	1,100
Bldg. 801, North Campus....	1942	44,597	1	115.7	223.1	1.92	85,626	1.75%	1,498	-75%	374

Use Adjustment: (1) normal use; (2) intensive use, add — for increased use; (3) new building below normal requirements for first four years; (4) not in use, requiring protective maintenance only.

Exhibit B is a copy of the form used in compiling data for determining the annual building maintenance budget.

In preparation of the biennial budget, we found it advisable to allow one column in the form for an item called the Adjusted Use Factor. It was found that, because of the greatly increased enrollment, some buildings were being used up to 50 per cent more than they formerly were used. It also was known that new buildings for the first three or four years require much below normal building maintenance. We found in taking over a close-by war training base that some buildings were used

little or not at all. In this case we required protective maintenance only for unused buildings. In order that our budget might be adjusted to these conditions, we increased or decreased our normal budget allowance for each building affected. Such adjustment was based on an estimated percentage of the normal cost.

There is not a great deal of work involved in making the computations; it requires comparatively little additional time over that required by any other method. Three items of information are necessary to make the computations. These are: (1) basic in-

formation about the building, including year built, original cost, type of building, and year and costs of additions built; (2) building construction cost data for the area, covering the three building classifications, and (3) maintenance cost factor.

Construction cost data may be found from data compiled by building trades publications or by surveys prepared by engineering offices organized to render such service. The maintenance cost factor must be obtained by a record of experience; in the absence of such record, the figures suggested on the preceding page may be used.

FRATERNITY FOOD is centrally purchased

at Bowdoin; the college also collects the board bills

BOWDOIN COLLEGE, A SMALL MEN'S college of 900 students in Brunswick, Maine, has operated a centralized dining room system for three years for 11 fraternities and the Moulton Union. By the end of this period every fraternity had made a profit, and the union had met its goal of breaking even. In fact, \$16,000 surplus is now being held for fraternities for the replacement of equipment; in addition, much capital equipment has been bought over these three years.

The monthly combined operating statement for the 11 fraternities of the Bowdoin centralized dining room service is unbelievably close to budget figures. (See opposite page.)

Before 1946 each fraternity dining room was operated as a separate unit. In some, results in certain years were satisfactory but, by and large, the system was generally unsound. There was no uniformity of management as poor

DONOVAN D. LANCASTER

Director, Moulton Union
Bowdoin College

undergraduate stewards followed good ones. Noncollection of board bills was common. Short notice ordering from the corner grocery store (the closest wholesale markets are at Portland, 30 miles away) was practiced. There was no group purchasing power, and there was a lack of accurate periodic reports to members—sometimes there were no reports at all over several months. Business houses hounded the college officials because of nonpayment of fraternity bills, and finally either alumni made up deficits, or one generation of undergraduates paid for bills of graduated students.

In the spring of 1946 college officials, fraternity alumni officers, and undergraduates met and worked out a plan of centralized operation. First, it

must be pointed out that the college itself was willing to help in order to make the plan a success. It offered the part-time services, at no cost to the fraternities, of the director of the union to head up this plan and offered to collect all fraternity dining room and fraternity room rent bills on the college term bill with no business office charge for this service. The college also agreed to have the fraternity dining room disbursements paid through the business office. Fraternity employees were promised workmen's compensation and retirement benefits of college employees.

The fraternities agreed to obtain all provisions and supplies through a full-time purchasing agent, a college official, who also would act as assistant director of the centralized dining room service. They agreed to pay 5 per cent of their dining room income each year to the college to meet expenses of the

operation. The scheme was not only accepted by all of the fraternities, but all of them have remained in the plan since its inception.

The main expense of operations revolves around a distributing center or warehouse. We are so far away from wholesale markets that a warehouse is essential. We were fortunate to obtain such a building a few miles from the campus at a deactivated naval air station. This is held under a revocable lease. For the navy this is a good arrangement as we keep the building in good repair and the equipment in excellent working order. The building includes excellent dry and cold storage. Provision is there for every type of food storage with separate boxes for meat aging, freezing, fruits, dairy, vegetables and ice cream.

The 5 per cent of income from fraternities and the college union is used to pay the purchasing agent, a bookkeeper, warehouse men, truck driver, truck, heat, light and repairs on the warehouse. This 5 per cent has covered the costs of operation of the system except the original contributory agreements promised when the system was put into effect.

The purchasing agent visits fraternities nearly every day and takes orders. Each afternoon meat orders are processed at the college warehouse butcher shop, and the next morning orders are delivered to fraternities. With permission of the purchasing agent, fraternity cooks buy fresh eggs and milk locally, and these are delivered directly to the houses by vendors. No attempt is made to standardize menus; thus the individualism so dearly loved by fraternity men is maintained. The men usually eat about the same things only on different days. Persuasion and not force is used when orders are accepted.

TURNOVER IS LOW

Accurate monthly records with inventories in each unit are kept. Some months the houses have big losses, but the men know about it within two weeks and correct their ways. But most cooks keep daily food cost records. Since the first year we have had a remarkable lack of turnover in fraternity cooks.

The college pays and charges the same price in and out of the warehouse with one exception—a charge of 1 cent a pound added for processing meat.

Combined Operating Statement for 11 Fraternities Using Centralized Dining Room Service

	BUDGET Per Cent	SEPT.-OCT. 1949 Per Cent
Income.....	100.0	100.00
Cost of food.....	60.0	59.80
Gross operating profit.....	40.0	40.20
OPERATING EXPENSES		
Salaries and wages (including waiters).....	25.5	24.90
Vacation time and workmen's compensation (regular employees).....	2.0	.....
Repairs and equipment.....	2.5	1.33
Fuel and other expense.....	3.5	3.47
Administration.....	5.0	5.00
Total Operating Expense.....	38.5	34.70
Reserve for repairs and equipment.....	.....	1.17
Reserve for vacations and workmen's compensation (permanent help).....	.....	2.00
Expenses.....	38.5	37.87
PROFIT.....	1.5	2.33
OPERATION		
	1947-48 All Fraternities	1948-49 All Fraternities
Income.....	100.0%	100.0%
Cost of food.....	58.2	60.1
	41.8	39.9
Wages.....	27.8	27.5
Repairs and equipment.....	2.7	1.3
Other expense.....	3.6	3.6
Administrative.....	5.0	5.0
	39.1	37.4
PROFIT—for contingency.....	2.7	2.5

No attempt is made to speculate on our inventory. In 1948-49 we had a gross operating income of \$350,000 for 850 students. Our food cost for the year was \$210,000, or 60 per cent. The average monthly inventory was only \$20,000. At the same time, buying for 850 students was much more economical than it was when 12 stewards or cooks each bought for his own little group.

Fraternities control their own policies, and most of them permit an unlimited number of guests without charges to members, no house party assessments, and food to be set out at night in pantries. The diet is ample and varied. Seconds on all foods are allowed. A great quantity of milk is consumed; in some houses there is access to the milk pitcher on the table three times a day. On homecoming, dads' day and for house parties nothing is added to the board bill for the huge quantities of food put out.

The college collects the board bills and in three years' time \$1,250,000 has been paid directly to the college and credited to fraternity accounts without a cent loss. Students are charged on term bills the exact number of days classes are in session. The

rate is uniform in all units, at present \$12.50 a week or about \$200 a term. All fraternities are credited with their own income and debited with their expenses. Each house is asked to keep a reserve of \$500 profit with the college.

LARGE FRATERNITY MEMBERSHIP

At Bowdoin we believe in the strong fraternity college. Our membership is more than 90 per cent fraternity. This plan, we feel, helps to strengthen the chapters. We try to operate, day by day, with little paternalism, letting the system work in the background. More friendships seem to develop in groups of 60 than do when several hundred eat together in one college commons. The union provides for interfraternity friendship during hours outside of meals.

Our undergraduate stewards are receiving good business training under leadership, and there is plenty of responsibility for them to assume. They are the men in charge in their own fraternities—chosen in a free election by their members. A training period for new stewards, in which they are oriented to their jobs and to the system, is rigidly adhered to.



BARD COLLEGE fire department O.C.D. trailer-pumper in action during practice drill.

With its own volunteer fire department,

this college feels **FIRE-SAFE**

ORMSBEE W. ROBINSON

Director of Public Relations
Bard College, Annandale-on-Hudson, N.Y.

BARD COLLEGE HAD TWO FIRES ON its campus last spring, one in the attic of a faculty dwelling, the other in a temporary veterans' unit. In both cases the fire was brought under control within a matter of minutes by the college fire department, a student volun-

teer unit. Property loss was negligible, and no one was injured.

Behind this statement is the story of four years of work by students interested in the safety and welfare of the college community. In 1946 a group of veterans approached the director of

buildings and grounds with a plan to provide for better fire protection on the campus. In addition to checking fire extinguishers and holding occasional meetings on safety, the men proposed to buy an O.C.D. trailer-pumper that could be towed by the college dump truck. If the college would help by purchasing hose and supplementary equipment, they would train themselves and others in its use. Their plan was accepted, and the Bard College fire department came into being.

At the time the plan was submitted the college did not have an adequate fire protection program or equipment of any consequence. Located 4 miles from the nearest town, Bard is particularly vulnerable if fire should break out in either its old structures or its new temporary units. Certainly if the two fires of last spring had had to await the arrival of the volunteer unit from the neighboring town of Red Hook, the loss would have been tremendous. The importance of the time factor is emphasized by the fact that the college department has never had to fight a large fire because it has always been on the job so promptly.

DEPARTMENT'S ORGANIZATION

The department is a volunteer unit, organized along the lines of a typical rural fire department. Membership is limited to 24 students and the director of buildings and grounds. It works closely with the administration, but it operates independently and initiates its own policies. The equipment is maintained with the assistance of the department of buildings and grounds.

The head of the organization is the fire chief, who has two assistant chiefs. Officers are elected by a majority vote of the membership and, up to this time, students have held all of these positions.

Each year new students are invited to try out for the department. They must attend four weekly drills in succession. If they satisfy the members that they are really interested in the work to be done and have devel-

oped sufficient competence to use the equipment, they are voted into the group.

IN-SERVICE TRAINING

During the college year the members are expected to participate in weekly practice drills, which stimulate interest and keep the members familiar with firemanics problems. The strategically placed fire cisterns and hydrants are used in these drills to assure greater efficiency in actual fire fighting. The members, within a month or so, will fight a simulated fire on every section of the 40 acre campus and thus will have a working knowledge of some of the problems to be faced should they actually be called to a fire.

The department is a member of the Mid-Hudson Harlem Valley Fire Chiefs Association and thus is an integral part of the mutual aid fire protection program of the area. Under this plan, it is on call at any time should neighboring town departments need assistance. The activities of the association also provide further opportunities for training through cooperative drills and special educational meetings led by outside experts.

EQUIPMENT

When it was first organized in 1946 the department operated with an O.C.D. trailer-pumper, capable of pumping 500 gallons per minute.

After six months of experience it became obvious that the water storage facilities on the campus were inadequate if protection was to be provided for the various college buildings. The problem presented by the older permanent structures was difficult enough, but the additional hazards presented

by the new temporary veterans' dwelling units made it even more important to have a water supply immediately available.

The first plan was to install an additional cistern, but after careful consideration the department decided on the purchase of a highly efficient emergency truck. The new piece of equipment was planned by the student fire chief and consists of a Ford "tonner" truck carrying a 400 gallon booster tank and a 75 g.p.m. rotary gear pump mounted on the front. The unit carries 150 feet of booster hose and 200 feet of 1½ inch leader hose equipped with low pressure fog nozzles. The truck, painted white, carries a smoke mask, resuscitator, first-aid equipment, ladder, CO₂ extinguisher, axes and so forth. It was purchased by the college at a cost of approximately \$2600.

In the fall of 1948 the department decided to streamline its equipment by retiring the O.C.D. trailer-pumper and purchased a 1932 Chevrolet truck for \$350 from a near-by department. The Chrysler pumping unit on the trailer was identical with the one previously mounted on the truck. Thus, the pumper was installed, and the department had a completely mobile pumper and hose truck. The new unit was purchased by the members with their own funds and presented to the college.

The equipment, which it is estimated cost \$4500, is maintained throughout the year by the department

of buildings and grounds, and when the students are not in residence it is operated by its employees. Each year the chief and his assistants assume responsibility for training these men.

RELATED ACTIVITIES

The work of the fire department is closely coordinated with that of the college's community safety committee, concerned with all matters pertaining to the protection of life and property on the campus—fire protection, traffic control, building inspection, and safety education. The chief is automatically a member of this committee to facilitate cooperation between the two groups. Members of the department regularly inspect buildings for fire hazards and may attend such public functions as dances, movies, concerts and lectures to serve as fire marshals. They also participate in special educational meetings and campaigns.

The contribution of the Bard College fire department to the safety and welfare of the college community has been of inestimable value. It also has been an outstanding example of student initiative and leadership. It has been equally valuable in improving the public relations of the college with near-by communities. The fact that the unit has achieved the status of a full-fledged department indicates that its skill and discipline have been recognized.

The students' active and intelligent participation in area programs has also given many individuals the opportunity to meet and work with Bard students as fellow citizens. Such relationships are too rare in college communities, but when they occur they do much to develop mutual understanding and respect.

Left: New emergency truck with its 400 gallon booster tank.
Right: The old pumper and hose truck answering a fire alarm.



THE COLLEGE DISCIPLINARY COMMITTEE AND THE COURTS



T. E. BLACKWELL

Treasurer, Washington University
St. Louis

FROM EARLIEST TIMES, THE COURTS have been alert to protect the college student against arbitrary and unreasonable actions on the part of the college administration. For instance, the old manuscripts record the fact that a writ of mandamus¹ was granted during the reign of Edward III (1327-77) directed to the chancellor of the University of Oxford commanding him to restore to full academic privileges a student "banitus" without good cause. In 1724, the English court commanded the chancellor of the University of Cambridge to reinstate a university fellow degraded for cause without a fair hearing.²

One of the first American cases³ on this question involved the expulsion of a young man from Dickinson College in 1886 for alleged disorderly conduct. The court, in its order commanding his reinstatement, found that he had been granted only a brief interview with the college president at the time of his dismissal. The court ruled that a college, even one not supported by public funds, could not summarily dismiss a student without ample notice of the charges against him. He must be given time to prepare his defense, obtain witnesses in his own defense, and be granted the right to confront and cross-examine those offering testimony against him.

A Missouri court⁴ in the same year of 1886 issued a writ of mandamus to compel the reinstatement of a young woman expelled from the state normal school for attending a party, with her father's consent, after she had returned

to her home. The court held that her expulsion had been arbitrary and unwarranted; that a college cannot be permitted to control the conduct of students outside the classroom if they are living at home with their parents. A Nebraska court⁵ in 1898 also granted the writ of mandamus to a student refused readmittance to the state normal school. Since the evidence indicated that the school had given no reason for refusal to allow the student to continue his studies, the Nebraska supreme court held that the action had been capricious and arbitrary.

In recent years, the courts have been apparently less ready to question the area of discretion of the college authorities. They also have drawn a line of distinction between the right of a student to continue his education in a tax supported institution and his right to attend one not subject to public control.

COURT'S OPINION HELPFUL

In 1901, the Ohio court⁶ declined to grant the writ at the request of a law student expelled from Western Reserve University for poor scholarship and misconduct. The opinion of the court included an excellent summary of procedures for the guidance of the members of future college disciplinary committees:

"That rule is so uniform that it has become a rule of law; that, in determining whether a student has been guilty of improper conduct, it is not necessary that the professors go through the formality of a trial. They should give the student every fair opportunity of showing his innocence. They should be careful in receiving evidence against him; they should

weigh it, determine whether it comes from a source freighted with prejudice; determine the likelihood, by all surrounding circumstances, as to who is right, and then act upon it as jurors, with calmness, consideration and fair minds. When they have done this and reached a conclusion, they have done all that the law requires them to do."

In 1928, the president of the State University of Montana dismissed a young woman student on the grounds that she and her husband had served intoxicating liquor to other students in their homes, contrary to university regulations. The court held⁷ that she had been accorded a sufficient hearing by being called before the council of deans, informed of the charges against her, and given an opportunity to deny them or to make a statement concerning them. The court pointed out that since there is no power vested in the president of a university to compel attendance of witnesses or to force them to testify, a proceeding as formal as a court of law was impossible.

The courts have been inclined to hold the view that the endowed colleges have a right to establish, by published regulations, the terms and conditions on which they will accept students and permit them to remain enrolled. A young woman was expelled from Bryn Mawr College without notice of the charges against her. The court⁸ refused to compel the college to reinstate her. It held that the relations between a student and an endowed college were merely contractual.

Apparently, the most recent case on this subject was decided by the Tennessee supreme court⁹ in 1942. A student was expelled from the school of medicine of the University of Tennessee on the charge of theft of examination questions. In his suit for reinstatement, he claimed that he had not been granted the right to confront the witnesses against him and cross-examine them. The court, in refusing his request, stated that

"We find it to be the unanimous holding of the authorities that the courts will not interfere with the discretion of school officials in matters affecting the discipline of students unless there is a manifest abuse of discretion or where their action has been arbitrary or unlawful."

¹State v. Clapp, 263 P. 433.

²Barker v. Bryn Mawr College, 276 Pa. 121 (1923), 122 Atl. 220.

³State ex rel. Sherman v. Hyman (171 S.W. 2d. 822), 18 Tenn. L. Rev. 210.

⁴Jackson v. State ex rel. Majors, 77 N.W. 662, 42 L.R.A. 792.

⁵Kobletz v. Western Reserve University (21 Ohio Cir. Ct. R. 144).

¹Mandamus to Restore Academic Privileges (1926), 12 Va Law Rev. 645.

²The King v. The Chancellor of the University of Cambridge (2 Lord Raymond's Reports 1334).

³Hill v. McCauley (3 Pa. cc 77).

⁴State ex rel. v. Osborne (24 Mo. App. 309).

*If school authorities are really interested,
it is relatively simple to organize a*

STUDENT HEALTH SERVICE

IN 1856 PRESIDENT STEARNS OF Amherst College said: "The breaking down of the health of the students, especially in the spring of the year, which is exceedingly common, involving the necessity of leaving college in many instances and crippling the energies and destroying the prospects of not a few who remain, in my opinion is wholly unnecessary if proper measures could be taken to prevent it."

This thinking led to the establishment of the department of physical education and hygiene at Amherst in 1859. One of the objectives stated at the inauguration of this health service had to do with the relating of education to health.

A college student health service is more than a first-aid station. At the secondary school level, concern about the student's health is largely confined to emergency treatment as the need arises and to certain limited instruction in the principles of healthful living. The health of the child at this level is largely a parental problem.

Hence, when the student goes away from home for the first time to enter college he is almost totally ignorant of the principles of personal and community health, and of his personal and group responsibilities in this important realm of his life. It is the duty of every college to meet this opportunity and responsibility so well that it will be impossible to graduate such wholly unprepared students.

Many college administrative authorities fail to appreciate the importance of a good student health service until a major epidemic or other catastrophe among the student body suddenly awakens them. Too often these authorities, of necessity, are so preoccupied with endowments, buildings and faculty that their responsibility for the health and health education of the student is neglected.

Hygiene is a continuous and dynamic process, and its value cannot be brought out by threats or fear of

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Director, Student Health Service
Alabama Polytechnic Institute

punishment. Each college administrative officer must motivate health knowledge among the students by proving that it pays. In order to do this successfully he must be aware



of the problem and firmly believe in its fundamental importance. Probably there will be few to deny the importance of health as related to a general education, but not many colleges have adopted a sound and thorough approach to the problem.

If it is finally agreed that technical, scientific and personal health education of the student is desirable, then it is the responsibility of the college administration to do something about it. Unless the faculty and officers are sold the idea to such an extent that they are willing to cooperate fully, then the student health service becomes a first-aid station.

DIRECTOR'S RESPONSIBILITY

The Alabama Polytechnic Institute is a state supported, land-grant college with an enrollment of approximately 7500. The student health service functions exclusively for regularly enrolled students. The director of the student health service is responsible to, and works with, the board of trustees, the president, and the business manager of the college regarding major administrative and financial policies. The

actual administration of the service is left to the director. The work of the student health service may be conveniently divided into three categories: (1) treatment, (2) prevention and (3) education.

Treatment. The physical plant consists of a modern, comparatively new 65 bed infirmary and student outpatient clinic, which was built by the college. It was originally intended for student use only, but in recent years it has served as a community hospital also. It is complete with wards, private rooms, x-ray and laboratory facilities, emergency room, operating room, delivery room, and offices. The personnel consists of two full-time physicians, 14 registered nurses, one full-time and two part-time medical technicians, dietitian, business manager, two secretaries, two student ambulance drivers, maids and orderlies.

We are prepared at all times to treat almost any medical emergency, injury or acute illness that may occur while the student is in residence on the campus. All students are required to report to the infirmary or clinic in case of illness, unless they are too ill to report. In that case, they are sent for by the college ambulance and brought to the hospital. Students with known chronic disease before they enter school are seen only in case of emergency, but they must arrange for continuation of care outside the health service. Treatment procedures of these patients are carried out only upon the direction and request of the family physician.

Patients are seen and treated on an outpatient basis in the clinic, which is open each day except Saturday afternoons and Sundays. When hospital care is advisable, they are hospitalized. The student is entitled to ten days' free hospitalization during each calendar year, and for all days over this number he is charged roughly one-half the private rate. Medication, laboratory tests, and diagnostic x-ray pro-

cedures, when necessary, are given during the hospital stay. Clinic visits are not limited.

Only emergency surgery is done. Most surgical cases are sent home or referred to a near-by veterans' hospital for operative procedures. When this is not feasible, a qualified local surgeon is called in to perform the operation needed. The student then pays only the surgeon's fee, the remainder of the expense being covered by the health fee. The college ambulance is used to remove students to their homes or to a neighboring hospital, if it is a reasonable distance.

Prevention. Each new student is given a complete physical examination, urinalysis and Kahn Test, and a brief medical history is taken before he is allowed to complete his registration for classes. These examinations are carried out by a team of physicians from the medical college of the state. A special effort is made to find incipient and early disease. Chest x-ray examinations are not done routinely, only when indicated from the findings on the physical examination. Two or three days are set aside at the beginning of each quarter for these examinations.

CHEST X-RAYS ANNUALLY

When this is done each record is carefully checked and on the basis of the findings the student is placed in the proper physical education class. These records are kept on file and are available for clinic records on each subsequent clinic visit. Each student is notified of any defects that are found, and he is urged to have them corrected by his home physician. Dental service is not provided. Neither are specialists in all fields available at the present time.

Members of varsity athletic teams are given special physical examinations at the beginning of each season. Only those in good physical condition are allowed to compete in varsity athletics.

At the time of examination each student is required to take immunizations against smallpox and typhoid or to present a satisfactory immunization certificate from his family physician. If this regulation is not complied with, he is dropped from the class rolls.

A well organized tuberculosis control program is a "must" for all student health services. Our program is carried out in cooperation with the state health department. Once each year each student or faculty member is required to have an x-ray of the

chest made. This is done by a photo-roentgen unit set up on the campus. If any films look suspicious, the persons involved are given a 14 by 17 x-ray examination, and these larger films are read by a qualified roentgenologist. Those films with positive findings are studied further as necessary, and each student is called in individually for a discussion. A close follow-up is kept on these patients and, of course, all those with active or questionably active cases are required to drop out of school.

CHECKING FOOD HANDLERS

The work of supervising food preparation and food handlers on the campus is done in close cooperation with the local county health department. Periodic unannounced inspections are made. All food handlers are examined prior to employment, and they must undergo physical examinations at regular intervals afterward. Food poisoning outbreaks are carefully investigated but, fortunately, the few that have occurred have been mild ones.

Education. The educational phase of the student health service at A.P.I. is not yet fully organized. The desire of the school is to graduate intelligent practitioners of healthful living, dis-



ciples of preventive medicine and public health, who will practice this knowledge among their own families and friends and use their influence as community leaders for the improvement of the community itself. In order successfully to do this, it is essential that the student be given a well rounded education in health.

At the present time health instruction is given largely through small various campus organizations; publicity and articles in the student newspaper, and lectures to all new students during the orientation program at the beginning of each quarter. This seems to be the ideal approach, provided the greater part or all the students can be reached. To require all

students to take a course in hygiene and health immediately destroys a lot of the student interest in the course. The answer probably lies somewhere between these two extremes, retaining certain features of both.

One of the great needs of college students today is within the field of mental health—counseling and psychiatric consultation. Much of this can be done by the college health service if it is willing to accept the rôle of counselor and educator, as well as physician. This, of course, depends upon the location of the college and upon the availability of such personnel in the community. At any rate, it is a distinct need, which should be carefully planned into any student health service organization.

FINANCING

The student health service is financed in this school as an auxiliary activity of the college. The income of the student health service is derived from both student health fees and private patients, with the greater part coming from the former. This money is spent entirely for maintenance, current expenses, and replacement of worn items of equipment.

The initial expense of building the hospital and equipping it was borne by the college. The business manager of the hospital supervises the buying of supplies and makes recommendations for improvements to the plant, but the actual accounting and disbursing are handled in the college business office.

The actual organization of a student health service is relatively simple, if the school authorities really want it. Our organization is not presented as a model one, but it is hoped that our experience may be of help to similar institutions faced with the problem of setting up a student health service.

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ROBERT A. SUMMERS

Food Service Director
Middlebury College, Middlebury, Vt.

ADDED TO THE MANY RESPONSIBILITIES of a college food service director or manager is the problem of policy in respect to planning and handling special catering or party requests for extra food services. Originating from a variety of sources, these requests come all the way from the president's office down to the spontaneous whims of student groups, and in some cases even extend to local civic or church groups in need of assistance.

While the ordinary functions of a food service director may be considered the staffing, equipping and operating of food services within the college, the word "operating" has come to have a broader meaning in the past few years and includes policy making and planning with respect to special and catering requests, as well as good public relations within the student body.

When I arrived at Middlebury almost four years ago, something happened which later was to determine the pattern and policy of my department. The local Chamber of Commerce and Rotary Club requested me to arrange a banquet for 400 returning World War II veterans to be served in the high school auditorium, which was unequipped for food service. Would this be an impossible task, they asked, with full table service, not cafeteria style? My immediate reaction was that the college would be most happy to cooperate and, in spite of the obstacles, the job could be done.

After I started thinking about the use of college facilities, equipment and perhaps personnel, I wondered if I had overstepped my authority. Here I was, a newcomer to the community, already making policy, possibly setting precedent. However, after consulting with the business manager, Irwin K. French, to whose office the food service director is responsible, I found that he was of the same mind and, as a result, our policy to cooperate to the best of

our ability with civic groups extended itself to include student, faculty and administrative requests for extra food service.

Although the problem differs between smaller colleges whose equipment and facilities are limited and larger institutions whose dining rooms and food service space are easily convertible, I am of the opinion that the



"can do" policy rather than the "no can do" policy should be applied to both large and small. Excluding the extra cost factor, which must of necessity be taken care of by an extra charge, good public relations between students and food service, town and gown, and faculty and administration may be improved by the "can do" food service department director, one who is not afraid to plan and plan ahead.

GOOD STUDENT RELATIONS

Adapting facilities for special and emergency use on any campus quickly and efficiently is sometimes difficult to do. Therefore, it is necessary in the first place to require adequate notice before special requests for extras are approved. A firm policy, especially with students, on this point will reduce emergency planning to a great extent. I feel strongly that in addition to feeding our students, we should be expected to help them. Ours is a service department just like the maintenance department; we serve students almost like hotels serve their guests, and in

many ways we are equipped to do even a better job because we do not have the profit motive to think about.

If good public relations exists between students and the food service department, emergency procedures often are relieved. Students who may be inconvenienced by having their meal hour changed or who are asked to relinquish their dining room for a meal hour changed or who are asked to relinquish their dining room for a meal because a college function necessitates the use of their dining room space often relish the idea of a change. This presents an excellent opportunity to show students you are interested by providing them something special in the form of either a buffet supper in the lounge or perhaps, weather permitting, an outdoor picnic. In this case what has happened? You have satisfied the student and, at the same time, your dining room is available to meet the catering demand for the special event.

One of the most important aspects in dealing with an extra request is the cost factor. It is important to let students know what the cost is going to be and perhaps some of the reasons why it costs so much. For example, they should realize that a special party means extra work for food service personnel as well as others. At Middlebury the food service staff is paid time and a half for work on an extra catering meal.

Then there is always the problem of handling, delivery, maintenance, depreciation and office costs which must be considered in determining the price of even punch and cookies for a dance, snacks for after-theater coffee hours, or box lunches to be taken on mountain club hikes.

Sometimes, after consultation with the student committees for food planning, they realize that the cost may be prohibitive for the type of function they wish, and often a suggestion by

the food service director or dietitian in charge as to a change in menu may mean the difference in their being able to hold the function or not.

Early in the year, a group of freshmen who were planning a banquet in honor of their successful football team came to my office. After determining that their cost would be approximately \$1.50 per person they were jubilant because they had the money in the class treasury to finance the affair. However, having had experience with this type of request before, I asked them what they were going to do when the hockey, basketball or baseball team had an undefeated season? The result was no banquet. They had not thought that far ahead. At my suggestion they settled for cider and doughnuts with sports movies and speeches as entertainment.

One of the most difficult things we come up against is convincing the student who has paid for his board on the semester basis that he should pay extra for a special meal served off campus. After a careful survey of this problem, we have made it a policy to charge cost plus 10 per cent for handling and service on all special requests for food service other than the regular college meals. Our answer in this case is that one of the reasons we are able to feed for the low price we do (\$10 a week) is because of a 20 per cent average absenteeism. The overtime pay for staff uses up nearly all the 10 per cent service charge and, while explaining the absenteeism factor is difficult, students do understand the overtime pay for the staff more clearly.

Sometimes I wonder why people in general take food service so much for granted. The interruption to prepare 100 box lunches for a mountain hike costs cash, not to mention the wear and tear on employee morale. To some employees the interruption in their regular routine is not worth the extra money they will receive. Here is another place in which the dietitian or food service director may have to use ingenuity in getting the extra work done.

Frequently we are asked to provide punch and cookies, or cake, ice cream, and coffee for after-theater parties or during dance intermissions. Pastry cooks whose schedule for the day is not too heavy are asked to carry the extra load at time and a half, of course. This problem is not a difficult one if advance notice is given in time. We

have six 40 quart insulated tanks (cost approximately \$32 each) that are available at a rental of \$1 a function. This rental is accounted for and when a surplus exists, more equipment is added or replaced.

Our catering equipment, built up over a period of three and a half years, includes extra china, silver, glassware, hot and cold containers with and without spigots, portable grills for outdoor cookouts, pots and pans, and many other small items too numerous to mention. We call this an example of planning ahead so that special or emergency events may be handled with a minimum of confusion or criticism. Ample stocks of paper goods are on hand at all times to supply the emergency.

ACCURATE RECORDS IMPORTANT

Adequate records are a "must" in the planning and accounting in connection with a special food request. While planning is necessary, other problems are equally important. After the initial request for a special party is approved by the dietitian or food service director, accurate records should be made of the ingredients and amounts used so that a correct cost may be determined. We should make sure that records of issues, ingredients used, and labor reports for staff involved in preparatory work are routed to our office. The nature and number of these accounting records vary with the size and type of college food service organization.

In connection with determining cost and selling prices of extra services, accurate accounting information also is necessary. Most all colleges maintain some record of the cost of feeding a student per meal or per day. Since these extras are not included in meals served, especially in a college operating on a paid semester basis, the total of cash brought in by these sales must be treated as "sales at cost." This is a term that we use at Middlebury in our accounting procedure to distinguish between regular meals and food sold at cost, perhaps to a church organization for its chicken pie supper or to the local American Legion Post for its annual clam steam.

These "sales at cost" are deducted from the cost of food used during the month before the cost per meal served the students is computed so that comparisons may be made, month to month and year to date. Cost prices are kept daily in the food service

office by posting information to a card system set up for the ordering, receiving, issuing and inventorying of food.

One of the most important aids to utilizing facilities is proper menu planning. Whether equipment is adaptable for a specific use often depends on what is desired or what is to be served. For example, if the problem is feeding 1000 students hot dogs, hamburgers and piping hot coffee on the mountain in subzero weather, it may be necessary to change the menu and give them a good stick-to-the-ribs beef stew instead, using paper cups and wooden spoons. Double boilers will hold the stew and you'll be surprised how long these heavy bodied containers will retain heat.

If insulated tanks are available, the coffee can be made ahead of time, transported to the area, and served in any kind of weather. If a college does not possess such equipment, I urge consideration of its purchase. It can be used to keep things hot or cold and will pay for itself many times over if a small rental fee is charged. We consider this insulated equipment the key to our off-location catering service now available to students, faculty and administration and for occasional civic or town functions.

Planning an extra service for visiting college officials, visiting teams, alumni reunions, homecoming buffets, class banquets, officials and guests of the annual winter carnival, trustees' luncheons, and planning special luncheons or teas at the president's house that are too large for his staff to handle, and commencement meals require real cooperation among the department heads of the college. At Middlebury any of these large catering requests are usually discussed with the business manager sufficiently in advance so that other department heads affected may be invited to conference and the final details worked out together.

Persons with the "know-how" for special events are called on, such as the superintendent of buildings and grounds whose job is to attend to the special construction, heating, lighting, power, transportation and setting up of equipment, loud-speaker systems, movie cameras, and so forth. The superintendent of residence halls may be called upon to provide sleeping accommodations or the rearranging of lounge spaces for meetings, discussion groups, feeding and cleaning. The treasurer or controller may be inter-

ested in the charges or manner of paying, ticket taking, and collections; the deans, faculty or other administrative officials may have comments concerning decoration, setup arrangements, time of service, and dress; the president's office may have some last-minute requirements or suggestions which must be passed on to interested parties, and the director of publicity should be made aware of the entire program.

Often persons who during previous functions have demonstrated ability

are pressed into service. This planning for special events includes the assistance of all departments before the food service department can put on the final touch and deliver the meal, tastefully prepared, and served in a smooth manner.

In the summer session, Middlebury is home to six different language schools—French, Italian, Spanish, German, Russian and English—in addition to the composers' and writers' conferences. Since no language other than

the five foreign ones are spoken in Middlebury, the English school and writers' conference are held at our Breadloaf Mountain campus, where we feed approximately 300 students during the summer. In addition to hiring additional professional personnel, the food department must provide waiters and waitresses who speak the language of the school. The menus, which are made up on the master plan in my office, are translated and printed daily in each one of the schools.

How a university cafeteria meets

big city **COMPETITION**

WALTER F. STEVENS

Manager, Levering Hall Cafeteria
Johns Hopkins University

COMPETITION IS THE SPARK PLUG to our business at Levering Hall cafeteria. It helps give the operation life and incentive for improvement. We take advantage of the many opportunities offered by our competitors by visiting their restaurants and observing new ideas. If the ideas are good, we incorporate them into our own operation. We extend the same courtesy to our competitors by making them welcome and even call their attention to things calculated to improve business.

We have found extra dividends in participating in the activities of the local restaurant association. The commercial operator has problems similar to ours and the mutual exchange of ideas has proved beneficial. Salesmen, too, can bring many new ideas that not only save money but add to the quality of service.

Our standards are high and we maintain a consistent food cost of 50 per cent. This means careful and constant checking of prices and portions in order that the customer may get full value for his money. Daily purchases and deliveries of perishable food supplies have kept both inventory and food waste to a minimum.

Gratifying results have been obtained by scheduling our three counters to offer continuous food service.



The hot food counter offers at least one soup or stew, two meats, one seafood entrée, six vegetables, hot homemade breads, and pastries.



Special à la carte orders are given immediate attention. The hot food counter opens for breakfast at 7 a.m. and continues through lunch to 2 p.m. It is reopened for supper from 4:30 p.m. until 7 p.m.

Breakfast is a heavy period at Hopkins, especially the light type of breakfast consisting of fruit, sweet roll, and coffee. The more substantial breakfast of hot or cold cereal, eggs, meat or griddle cakes is especially popular during the winter months.

During lunch and supper the hot food counter offers at least one soup or stew, two meats, one seafood entree, six vegetables, hot homemade breads, and pastries.

The sandwich and salad counter opens at 10 a.m. and remains open continuously until 7 p.m., serving at least 15 kinds of sandwiches on toast, bread or rolls. One hot sandwich (hamburger, frankfurter, grilled American cheese) is prepared by the grill daily. A generous variety of salads, pies, cakes and puddings is displayed.

The soda fountain is open from 9 a.m. through 8:30 p.m., offering full and complete fountain service. Ready-made sandwiches and paper-packaged milk speed up service. One of the more popular items is our jumbo milk shake, which is prepared and served in the same paper container.

The continuous service and variety of food have increased sales more than 20 per cent.

Modern equipment, properly used, reflects lower wage and food costs.

In addition to our regular cafeteria operation, we solicit and cater to special parties, banquets, weddings and smokers. These offer a substantial increase in sales and add much good will.

One of the most important factors in maintaining our high standard is our constant personnel training program. Each new employee is trained individually by the manager or his assistant, and the training includes not only the operation of the cafeteria but the part played by it in the life of the university. He is taught the percentage breakdown of each dollar received by the cafeteria, is told of his own opportunities for improving his position, and is made to feel an integral part in the university life as a whole.

FREE-FOR-ALL DISCUSSION

This initial program of training is supplemented by the regular monthly employee participation meeting. Here our entire staff of 45 full-time employees and one part-time student employee gathers for a discussion of problems and suggestions.

Each employee is aware of the fact that the pay-roll cost must not exceed a yearly average of 28 per cent, including management. We have found that acquainting the employee with the percentage figures of the operating cost of each dollar received makes him a

more interested employee. Pay-roll percentage is figured at the end of each day's business.

It is our belief that the cafeteria should be self-supporting, putting us on an equal basis of operation with our competitors. Rent, utility service, new equipment, and repairs are taken from gross profit. Net profit is used to improve the physical setup. For example, last year we hung six new oil paintings in the dining room, thus taking away the institutional atmosphere.

Modern equipment, properly used, reflects a lower wage and food cost, better prepared food, more satisfied customers, a more valuable employee, and a more efficiently run business. (The important thing here is not to become overequipped.) We have installed a speaking system from steam table to kitchen, a slicing and cutting machine, and a double-tank dishwasher with a super steam heater that provides ample rinse water at 190° F. at all times. A stainless metal soap dispenser for the pot and pan sink dispenses soap and hot water simultaneously, giving a constant alkalinity content. This operation has cut down on soap cost 20 per cent. All ranges are equipped with thermostats.

A well trained, better paid employee, good equipment, wholesome food well prepared at reasonable prices, and pleasant surroundings make a combination hard for a competitor to beat.

NEWS

Segregation Cases Before Supreme Court . . . Special Loyalty Oath Ruling Is Rescinded by California Regents . . . Harvard Improves Pension Plan . . . Asserts Retirement Age Too Low . . . Job Outlook Reviewed by Veterans Administration

Supreme Court Hears Three Cases Involving Segregation in South

WASHINGTON, D.C. — History was in the making on April 4 and 5 when the U.S. Supreme Court heard arguments on three cases that may shake the foundations of public education in the South.

The first involved Elmer A. Henderson, a Negro, who was refused dining room service on a Southern Railway dining car. He was represented not only by his own lawyers but also by U.S. Attorney General McGrath, who asked the court to strike down racial segregation in all public places.

The second case involved G. W. McLaurin, a Negro student at the University of Oklahoma. His attorneys argued that it was illegal for the university, a public institution, to require him to sit in anterooms while listening to lectures. White Oklahoma officials replied that McLaurin was receiving the same education as white students "and that to abolish racial segregation would empty all the public schools of Oklahoma."

The third case centered around the charge of Heman Sweatt, a Negro student, that the law school provided for Negroes in Texas is not equal to the law school for whites.

The U.S. Department of Justice stepped into each case to demand a clear-cut ruling that segregation is unconstitutional.

However, it is possible that the justices will avoid such a drastic step. Legal experts point out that there are ample means for bringing redress to the Negroes in the specific situations without making broad constitutional interpretations.

"But even limited measures in favor of the Negro claimants would bring racial barriers into disrepute, would undermine them and would eventually

lead to the end of racial segregation in the public schools of the South," observers say.

Decisions in all three cases are expected by June.

Scholarships for Kin of Trade Union Members

NEW YORK. — Columbia College announced recently the launching of a scholarship plan for children of members of the New York City Union, Local 32B, Building Service Employees International Union, A.F.L.

The plan, established by the joint executive board of 32B, calls for four full scholarships in Columbia College or Barnard, to be awarded annually to children of 32B members. Each scholarship will carry an annual stipend of \$1200. With four scholars entering each year, a total of 16 will be in residence by September 1953 and thereafter. The young men will study at Columbia College, the university's undergraduate liberal arts college for men; the girls in Barnard, Columbia's undergraduate college for women. After the full group of 16 is enrolled, the program will represent an annual outlay of \$19,200 to the union.

Under the plan proposed by 32B, Columbia academic officials will carry out the screening and selection process, which will include competitive examinations, personal interviews and surveys of high school activities.

Seeks Building Funds

NEW YORK.—Manhattan College is rushing plans to add two new units to its campus in Riverdale prior to the celebration of its centennial in 1953. The college hopes to break ground this year for an engineering building and then to begin preparation for a science school. Both projects are expected to cost more than \$1,000,000.

U. of California Rescinds Ruling on Loyalty Oath

DAVIS, CALIF.—As a result of a 21 to 1 vote, the regents of the University of California voted on April 21 to rescind the requirement of a special loyalty oath for members of the university staff and to accept a compromise proposal that was drafted by the council of the California Alumni Association.

Controversy arose as the result of action by the regents requiring all university employees, including professors, to sign an anti-Communist oath by April 30 or lose their jobs. The special oath was in addition to the standard oath of loyalty to the Constitution.

According to one regent, Roy E. Simpson, state director of education, leaders of the university's academic senate, which had led the opposition to the special oath, have indicated they would accept the compromise formula.

The alumni council, which spoke in behalf of the 36,000 graduates of the state university, submitted a three-point proposal which recommended the following: (1) All employees of the university be required to sign the constitutional oath required of all state officials rather than the special oath originally demanded by the regents. (2) All employees be required to sign a new contract of employment which includes the statement: "I am not a member of the Communist party or any other organization which advocates the overthrow of the government by force or violence." (3) Persons declining to sign both the oath and the contract of employment may petition for a hearing by the academic senate committee on privilege and tenure. The power of final decision would be retained by the board of regents.

The one vote cast against the compromise was by Lawrence M. Gian-

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nini, head of the Bank of America, who stated that he considered the compromise "a victory for communism," and is reported to have indicated he would resign from the board of regents if the proposal is approved.

According to news reports, the alumni council formula was presented to the board of regents by Dr. Robert Gordon Sproul, president of the university, who referred to it as "the best solution at this late date" and said it "confirms and emphasizes the anti-Communist policy desired by members of both the faculty and board of regents."

Faculty members had opposed the special loyalty oath on the basis that it represented a threat to academic freedom and an assault on their personal integrity. However, the faculty at the same time is on record as opposing the appointment of Communists as teachers.

This recent action by the board of regents in accepting the alumni council's proposal appears to have settled the bitter controversy, according to qualified observers.

Arbitrary Retirement Age Attacked by Economist

BOSTON.—Speaking before a group of businessmen at Northeastern University in Boston, Sumner H. Slichter, Harvard economist, asserted that the arbitrary retirement age of 65 which has been established in many pension plans is too low.

Prof. Slichter maintained that there is no logical basis for the figure of 65 as a retirement age. He pointed out that it was incongruous to set so low a retirement age, just at a point when man's life span is being increased by great new developments in medicine. More provisions in regard to employees are necessary, he stated, in that both labor and management seemed to set too great a value on employees who "stay put" for long periods of years. He felt that there was no especial merit to the inertia that holds employees in one firm in many instances. Employees with the initiative to move and better themselves frequently make equal or even greater contributions to American economy.

Higher Education Group Considers Loyalty Oaths, Segregation, Scholarships

CHICAGO. — More than 900 delegates from colleges and universities in 44 states attended the fifth annual National Conference on Higher Education in Chicago, April 17 to 19, sponsored by the department of higher education of the National Education Association.

Among the subjects discussed by speakers and study groups were teacher education, fraudulent schools and colleges, the problem of who should go to college, financial aid to students, adult education, and loyalty oaths.

A committee on fraudulent schools and colleges, appointed by the executive committee of the department of higher education in November 1949, is making a study of the state laws governing the granting of charters. When the study is completed, the committee will attempt to formulate recommendations to state legislatures regarding needed improvements in laws governing charters and licenses for schools.

The report of a group studying the problem of who should go to college said, in part: "Any individual who has the eligibility as measured by a college's own standard and whose interests fit the purposes of that college should be admitted regardless of race, color or creed as long as the institution has room available. . . .

"With respect to recent predictions of dire consequences resulting from a 'surplus' of college educated individuals, it is felt that a college education in the United States has not had generally the same kind of prestige value that it has had in Europe, chiefly because the opportunity has long been much more widespread in this country than abroad. There is an increasing necessity, however, for making clear to our students the fact that great financial advantage may not accrue from attendance at college. This emphasizes, too, the need for as broad a base as possible in such education, so that a student will not be placed in society with skills so narrowly specialized that changing conditions will necessitate adjustments which are difficult for him to make."

A group studying financial aid to students recommended that private agencies, individuals and corporations



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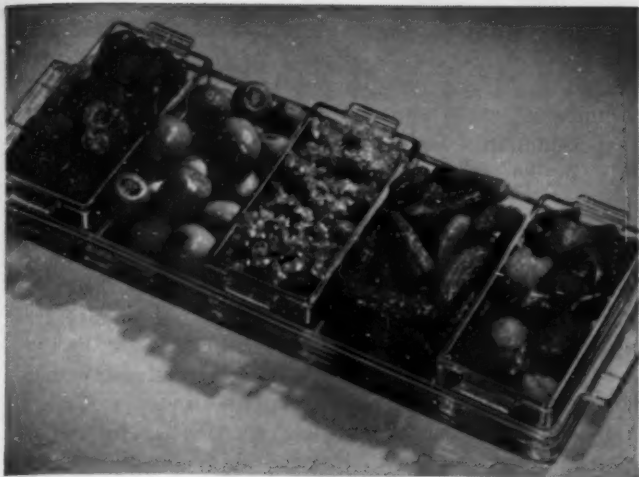
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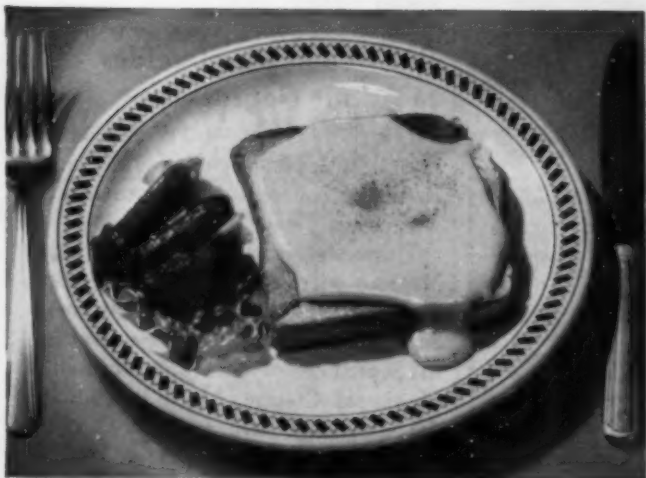
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NEWS.

be encouraged to continue and to increase their contributions to scholarship and loan funds and that the federal government be asked to revise the tax structure to make such contributions feasible; that the federal government provide a scholarship program, and that the states examine and revise their present scholarship programs and explore the possibilities of extending such programs.

Educational freedom in America is endangered by threatened loyalty oath

requirements and purges, said T. R. McConnel, dean of arts and sciences at the University of Minnesota.

"If one believes that Communist party members should not be appointed to teaching positions," he said, "it does not follow that legislatures or university administrations should engage in faculty purges.

"Unreasoned and unfair attacks on the colleges for harboring Communists or pro-Communists are undoubtedly prompted by a variety of motives—

some of them are frightened and hysterical, some are the product of anxiety, and some are deeply sinister. Sinister opponents of educational freedom will go to any length, no matter how unethical and dishonest, to discredit men whose ideas they consider dangerous to their special interest and to repress free discourse by terrorizing methods. Many efforts to curb free inquiry are based on the assumption that loyalty is equivalent to uncritical acceptance and advocacy of the status quo."

Among the resolutions adopted by the conference was one concerning discrimination by colleges and one reaffirming the need for a federally supported scholarship program.



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Western Reserve Extends Health Service to Case

CLEVELAND. — Western Reserve University and Case Institute of Technology recently agreed to an extension of Western Reserve's health service to cover Case students, according to a joint statement by Presidents T. Keith Glennan of Case and John S. Millis of Western Reserve.

All full-time Case students will get identical health service with Western Reserve students at the same cost of \$6 a semester. The health service treats all ambulatory patients and pays for all sorts of examinations, tests and consultations except dental care and eye refractions. Heretofore, a limited health service had been provided Case students by Dr. Donald A. Kelly, college and athletic team physician. Under the new arrangement, Dr. Kelly, also doctor to the Cleveland Indians, will be assistant director of the health service under A. B. Denison, with special responsibility for care of Case students, numbering approximately 1400.

U. of Louisville Decides to Admit Negroes

LOUISVILLE, KY. — The University of Louisville recently became the sixth Kentucky college to announce that it will admit Negro students.

University trustees announced that Negroes will be admitted to the graduate and professional schools next September and to the entire university in September 1951. The Louisville Municipal College, Negro branch of the university, will be closed when the 1950-51 academic year ends.

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NEWS.

Residence Hall and Gymnasium for Wagner

NEW YORK. — Wagner College, Staten Island, has announced through Dr. Frederic Sutter, president of its board of trustees, that the institution plans to construct a woman's residence hall and a gymnasium. Total cost of the projects is expected to be \$950,000.

Wagner College's share of the nationwide Christian higher education year appeal of the United Lutheran

Church has been earmarked for the residence hall. It has been estimated that this amount will reach \$350,000. The college will enlist the support of Staten Island residents for the purpose of raising funds for the gymnasium.

According to present plans, the residence hall will accommodate 112 women. A three-story building, it will have self-operating elevators, guest parlors, a laundry, recreation room and snack bar. It also will have a small kitchen on each floor.

Harvard Reduces Cost of Pension Plan But Retains Same Benefits

CAMBRIDGE, MASS. — In a recent letter to all employees of Harvard University, John W. Teele, director of personnel, has suggested improvements in the existing Harvard pension plan, which went into effect in 1936.

Benefits were increased in 1948 when the entire administration of the plan was changed from an insurance company to the university itself. The employees have contributed 4 per cent of their wages, and the university has paid the balance of the amount necessary to finance pension accruals. In addition, the university has contributed to the pension fund a substantial amount in order to finance past service credit for employees who worked for the university prior to 1936.

Mr. Teele pointed out that the cost to employees will be reduced July 1 from 4 per cent of wages to 3 per cent in anticipation of the extension of social security legislation to cover university employees. Although the cost to employees is being reduced, the existing scale of pension benefits will be maintained as at present.

The proposed minimum pension arrangement would provide a substantial retirement allowance for all retiring employees, including those who cannot expect to benefit from social security provisions. The scale would provide \$50 a month pension for all employees with 10 years' service. The top minimum would be \$100 a month for an employee with 20 years' service. A long-service employee would receive a pension exceeding the minimum. The general objective of the Harvard pension plan with the proposed changes will be a pension not to exceed 50 per cent of final pay for long-service employees.

Of the 4172 employees of the university, 1799 are now participating in the pension plan. The remainder will be eligible when they have completed three years of service.

Business Leaders and Educators Confer

EVANSVILLE, IND.—More than 400 business and industrial leaders of Evansville and the Tri-State area of Indiana, Illinois and Kentucky participated recently in a meeting to con-

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NEWS.

sider mutual interests of private higher education and business and industry.

The meeting was sponsored by Evansville College in cooperation with other private colleges in Indiana and was the second such meeting in the state, the first having been sponsored by Earlham College last October.

The meetings are of an educational nature and are not designed to raise funds for a particular project or institution, according to President Lincoln B. Hale of Evansville College. "Rather,"

he stated, "they are in the nature of an experiment in fuller cooperation between the private, independent colleges of Indiana and business and industry."

"While corporations look to higher education for the training of youth for professional and managerial positions, mutual interests are much broader. Both the private colleges and business and industry cherish the same principles of freedom from undue government restraint," Dr. Hale said.

V.A. Gets Aid in Counseling Veterans on Job Outlooks

WASHINGTON, D.C.—A recent supplement to the Occupational Outlook Handbook has been prepared for the Veterans Administration by the Bureau of Labor Statistics of the U.S. Department of Labor.

The supplement is being distributed to V.A. advisement and guidance officials for their use as an aid in counseling veterans. The supplement describes job outlooks for a number of specific positions in the field of business which college administrators might find helpful in the counseling of graduating seniors. The following are excerpts from the booklet:

Advertising. "Advertising jobs have been extremely hard to get for the average applicant and are likely to continue to be so for a number of years."

Banking. "Most of the job openings in future years in positions suitable for university business graduates will be to replace executives or specialists in various departments who die or retire."

Insurance. "Insurance is still a growing field, and there will be many openings for agents and brokers to establish successful careers and make good incomes. . . . There will be relatively few openings for underwriters, since it is a small occupation and is not rapidly expanding."

Market Research. "There should be at least a moderate expansion in employment over the long run but not more than a few hundred openings are likely to be available in any one year."

Office Management. "College training in business is not yet generally established as a requirement for office management positions; however, there is some trend in this direction."

Personnel Administration. "In mid-1949, the personnel field was generally overcrowded. Graduates with no experience are finding it difficult to obtain entry jobs, and this situation probably will continue for a few years."

Retail Management. "The general picture is a growing trend toward training business graduates for executive jobs in department stores and in large chain store units. Because of the personal factors, many executive jobs in the larger establishments always will be filled by persons who

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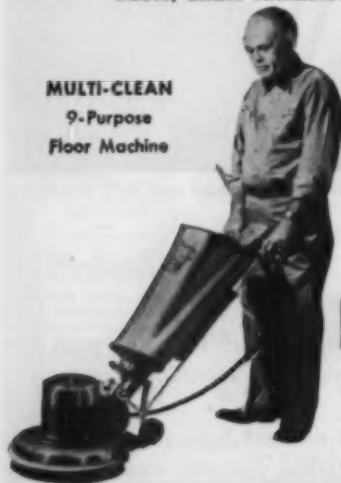
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Institutional Chair No. 4302

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Very simple in design, this chair (No. 4302) combines beauty, comfort and utility. Sparkling natural aluminum frame contrasts happily with colorful upholstery. Well proportioned, shaped seat and back, cushioned with foam rubber if specified, insure comfort. Good balance, light weight and a back built with conveniently shortened upholstery unit, make the chair easy to lift and move about.

Welded aluminum construction insures a long lifetime of useful service—never any splinters, no loose joints, no rattles, no squeaks, no repairs and no upkeep. The satin-smooth, hard anodized finish is kept clean and bright by simple washing with soap and water.

Goodform No. 4302 and its "twin" model, No. 4303, are particularly well suited for use in dining rooms, ballrooms, meeting rooms and other institutional areas where good-looking, sturdy, low-lifetime-cost chairs are desired.

Write for a free, color-illustrated booklet which shows other models available

in the Goodform institutional chair line. The General Fireproofing Company, Department S-17, Youngstown, 1 Ohio.

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NEWS.

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Selling and Sales Management, "Selling work and sales management will continue to be one of the main fields of opportunity for graduates of collegiate schools of business."

Seek Funds for James Forrestal Fellowships

ANNAPOLIS, MD.—The United States Naval Academy announces that it has recently taken advantage of its extensive collection of materials on naval history and of the proximity of Washington library collections to establish fellowships in naval history in memory of the late Secretary of Defense, James Forrestal.

Since no government funds are available to set up and support the fellowships, the navy must rely on contributions from patriotic persons and organizations. The sum of \$75,000 is needed to provide for one fellow and adequate clerical help for five years. A committee, which will include civilian scholars appointed by the Secretary of the Navy, will award the fellowships and administer the fellowship funds, according to a recent announcement.

Brown Plans to Cut Enrollment 20 Per Cent

PROVIDENCE, R.I.—Administrative officers of Brown University have announced that they plan to effectuate a 20 per cent reduction in enrollment by February 1952. The present enrollment of 2740 male students will be reduced to 2200, according to this program.

Dr. Samuel T. Arnold, university provost, said that there will be a similar percentage cut in faculty. There are now 450 faculty members, including graduate assistants, and the faculty cuts will, for the most part, be among the instructors and graduate assistants groups.

The cut back to a total of 2200 students is planned for the purpose of allowing the university to utilize its present physical facilities without overcrowding. Its facilities, like most institutions of higher education, have been overtaxed as the result of the high enrollment of veterans under the G.I. Bill of Rights and the general trend of high school graduates to continue on for college degrees.

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Urges School to Educate People for Retirement

NEW YORK.—Dr. Alonzo F. Myers, chairman of the department of higher education at New York University's School of Education, has suggested that in today's society what is critically needed is the establishment of a new kind of school devoted to helping men and women prepare for successful retirement. Such an institution, Dr. Myers stated, is needed because most

people approach the prospect of quitting their lifelong careers with wholly inadequate preparation, psychological and otherwise.

"It is the task of education," Dr. Myers stated, "to train people to the point at which they will begin planning every aspect of retirement well in advance of the date they quit work." Such planning will avoid some of the psychological maladjustment that takes place as a result of inadequate preparation for retirement.

Record High Enrollments for New York Colleges

ALBANY, N.Y.—The New York State Education Department reports that colleges and universities in the state had enrolled 337,067 students for the spring semester. This is the highest enrollment ever reported in the state. However, 16,178 students in the state university's agricultural and technical institutes were included. These were not accounted for in the record high of 326,885 last November.

Without the institute figures, spring enrollments totaled 320,889, a 2 per cent drop from the fall term.

Three institutions in New York City account for 33 per cent of the total. New York University is the largest unit, with 48,101 students. City College has 35,626, and Columbia University, 27,742.

Greensboro College Adopts Master Plan

GREENSBORO, N.C.—By action of the board of trustees of Greensboro College, a master plan to meet the building requirements of the institution for the next 25 years recently was adopted.

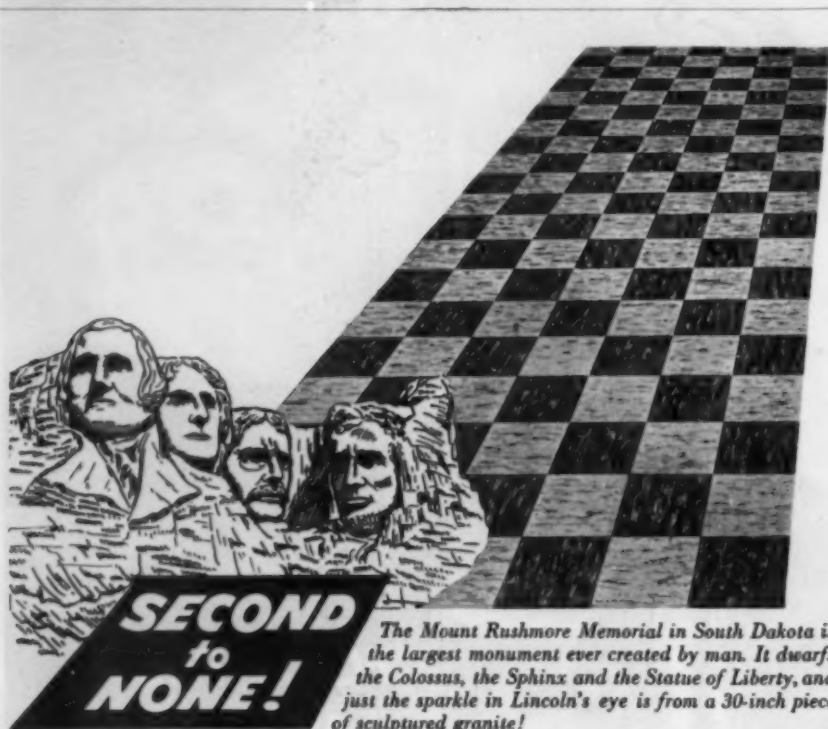
Five new buildings in the master campus plan include a science-classroom building, an additional residence hall, a chapel, a library, a gymnasium and swimming pool, and enlargement and renovation of existing kitchen and dining facilities in Main Hall.

According to Mr. Hanes, an additional \$850,000 in endowment also is needed to bring Greensboro College's invested funds up to the minimum \$1,500,000 required for its size.

Bradley U. to Limit 1950-51 Enrollment

PEORIA, ILL.—A report from Bradley University reveals that the institution will limit its enrollment next year for the first time in its history. Plans call for a maximum enrollment of 3250 undergraduate students, which represents a drop of 445 students from this year's overflow registration.

The decision to limit enrollment was made on the basis of maintaining the advantages of a medium sized institution and of preserving and improving close relationships among students and between students and faculty members.



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NEWS

May Convert Institutes Into Community Colleges

ALBANY, N.Y.—The possibility of converting the New York State Institute of Applied Arts and Sciences in Brooklyn and four other similar state institutions into community colleges has been proposed in New York State as a result of the filing of a report for the legislature by the Temporary State Technical Institute Board.

It was suggested that a study be made of the possibility of converting the institutes into community colleges rather than a specific conversion. If the change should be carried out, it would provide for financing on an equal basis by the state and the city and from tuition fees. At present, the institutes are financed entirely by the state.

It is estimated that conversion of the schools into community colleges would effect a saving of \$1,210,232 on the basis of current operations, with the balance to be made up by the cities where the institutes are located and the students. Those other than the one in Brooklyn include institutes in White Plains, Buffalo, Utica and Binghamton. The institutes were authorized on a temporary and experimental basis in 1945 to provide two years of post high school in technical subjects.

Christian University in Japan Gets Housing

NEW YORK.—The Rev. Dr. Ralph E. Diffendorfer, who is president of the Japan Christian University Foundation, reported recently, following a two months' visit to Japan, that substantial progress had been made toward the opening of an International Christian University in Japan. The university will utilize the buildings and facilities of a wartime fighter plane factory.

Dr. Hachiro Yuasa, American trained entomologist and educator, has been named president of the non-denominational university. Dr. Yuasa is now president of Doshisha University in Japan.

The Japan Christian University Foundation is opening a campaign in the United States and Canada for \$10,000,000. According to Dr. Diffendorfer, successful completion of this drive will permit opening of the International Christian University in Japan in April 1951. Selection of a

faculty, only half of which will be Japanese, is now underway. The group is assembled in the United States for nine months of seminar study and observation of American educational practices prior to the opening of the university.

50 New Buildings in Next 10 Years at Brandeis

WALTHAM, MASS. — Brandeis University has adopted a master plan for development of its 100 acre campus that will provide for construction of 50 new buildings in the next 10 years at a total estimated cost of \$22,715,000.

The master design has been prepared by the firm of Saarinen, Saarinen and Associates of Bloomfield Hills, Mich., and calls for execution in two stages: the first phase will be the construction of facilities for the Brandeis University Faculty of Arts and Sciences, and the second will provide for the needs of the university's projected professional and graduate schools. It is hoped that the entire program will be completed by 1960.

Unusual Arrangement for New Residence Hall

NEW YORK.—The Rev. Laurence J. McGinly, president of Fordham University, announces that plans are underway for construction of a four-story residence hall that will accommodate 400 students and 25 Jesuit faculty members.

According to present plans, the residence hall will be composed of 14 units, each with four double bedrooms, a bath, and a common study, to provide an environment conducive to study and social life. The building will be divided into seven sections, each with its own entrance.

Though no formal date has been set for the beginning of construction, it is expected that the building will be ready for partial occupancy early in 1951.

Middlebury Builds

MIDDLEBURY, VT.—Middlebury College will commemorate the 150th anniversary of its founding by erecting a woman's residence hall unit providing accommodations for 150 students. It is hoped that the building will be completed in time for the formal sesquicentennial celebration on September 29 and 30.



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JOHN SEXTON & CO., 1950

NEWS.

NAMES IN THE NEWS



C. A. Kasten

Carl A. Kasten has been named as business manager of Drake University, Des Moines, Iowa. He replaces Merrill M. Barlow, who resigned February 1 to become business manager of the National Conference of Christians and

Jews. Mr. Kasten was formerly associated with a Chicago firm that designs and prints business forms. His appointment at Drake became effective May 1.

W. W. Parker, president of Southeast Missouri State College, Cape Girardeau, has been named by President Truman as one of the two new members of the board of visitors, United States Military Academy, West Point. His is a three-year appointment.

Harlan S. Kirk, assistant business manager and purchasing agent, Iowa State College, Ames, has been appointed business manager of Lawrence College, Appleton, Wis. His appointment at Lawrence becomes effective in July. Prior to Mr. Kirk's service with Iowa State, for eight years he was assistant business manager of Berea College, Berea, Ky. L. E. Sauvain, manager of the Iowa State bookstore, has been named to succeed Mr. Kirk as assistant business manager and purchasing agent. Mr. Sauvain has been a member of the college bookstore staff since 1921.



H. S. Kirk

Brother J. Ambrose, F.S.C., formerly vice president of St. Mary's College, Winona, Minn., has been appointed president of the college. He succeeds Brother Joel Stanislaus, F.S.C., president of the college for the last six years. Brother Stanislaus has been assigned to the faculty of Christian Brothers College, Memphis, Tenn.

Geoffrey Walshe, assistant to the bursar in charge of purchasing and supplies at Hofstra College, Hempstead, N.Y., has been named superintendent of plant.

Boyd Crumrine Patterson, head of the department of mathematics at Hamilton College, Clinton, N.Y., has been named president of Washington and Jefferson College, Washington, Pa. He will succeed James Herbert Case Jr., who was granted a leave of absence last year in order to make a study of issues confronting the small independent college.

Ronald Weber, business manager, Mount Union College at Alliance, Ohio, has been appointed to the post of vice president of Mount Union College, where he will be in charge of all financial interests of the college, including fund raising. He takes over his new duties July 1.

Dr. Matt L. Ellis, president of Hendrix College at Conway, Ark., has been elected president of the North Central Association of Colleges and Secondary Schools.* Dr. Ellis has been president of Hendrix College since 1945.

Rev. LeRoy A. Martin, formerly superintendent of the Paterson district of



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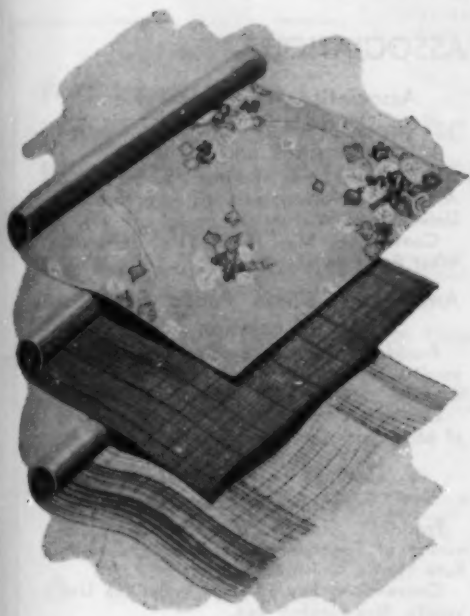
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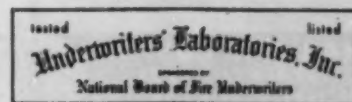
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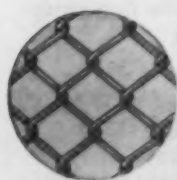


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NEWS

the Newark Conference of the Methodist Church, New Jersey, has been named president of Tennessee Wesleyan College, Athens, to succeed James L. Robb.



D. C. Wheaton

Don C. Wheaton, treasurer of Sweet Briar College, Sweet Briar, Va., since 1942, has been named to the newly created post of financial vice president of Kenyon College, Gambier, Ohio. Mr. Wheaton will be responsible for all business and financial affairs at Kenyon College after reporting to his new post on July 1.

Detlev W. Bronk, president of Johns Hopkins University, Baltimore, has been elected president of the National Academy of Sciences, the highest honor in American science. He will succeed Alfred N. Richards, who resigned because of ill health one year before the expiration of his term. Dr. Bronk will take office on July 1 for a four-year term.

John R. Everett, 31 year old chairman of the department of philosophy in the School of General Studies at Columbia University, has been elected president of Hollins College, Hollins, Va. Dr. Everett will assume his duties in July when he succeeds Bessie C. Randolph, who will become president emeritus upon her retirement on June 30 after serving the college for 17 years. The new president will be the fourth in the history of the 108 year old school.



J. R. Everett

Spencer Miller Jr., New Jersey highway commissioner since 1942 and recognized leader in engineering and education, has been named president of the American International College at Springfield, Mass. His appointment is effective July 1.

Maj. Gen. Ernest N. Harmon, retired army officer, has been named president of Norwich University, Northfield, Vt. He succeeded Homer L. Dodge, who announced his retirement as becoming

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Convention: May 15-17, Yale University, West Point on May 18.

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Convention: June 27-30, 1950, University of Michigan, Ann Arbor.

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President: George W. Armstrong, University of Pennsylvania; secretary-treasurer: Ruth Harris, University of Illinois.
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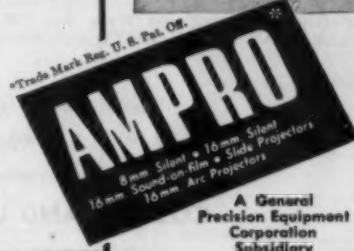
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NEWS.

effective February 1 of this year. R. D. Guinn, director of admissions, is serving as acting president until June, when Gen. Harmon will assume his new responsibilities.



G. W. Gore Jr.

George W. Gore Jr., dean of instruction and director of the graduate division of Tennessee Agricultural and Industrial College, Nashville, has been named president of Florida Agricultural and Mechanical College, Tallahassee. He will succeed William H. Gray Jr., who resigned in 1949.

Dr. Grayson L. Kirk, provost of Columbia University, also has been named to the post of vice president of the university. He will assume his new duties July 1, upon the retirement of George B. Pegram.

Dude Neville McCloud has been added to the staff of North Texas State College, Denton, Tex., as news service director. Her husband, **Robert J. McCloud**, news service director for the last two years, has been named sports publicity director. The news functions will be divided into two administrative offices—sports publicity and news service.

Howard B. Matthews, assistant business manager of the University of Chicago, has been named vice president and treasurer in charge of finance at Wesleyan University, Middletown, Conn. His appointment becomes effective July 1.

John E. Burton, state budget director of New York, has been named vice president in charge of business affairs at Cornell University, Ithaca, N.Y. Mr. Burton, who is 42 years of age, retired as budget director May 6, after having served since 1943. He succeeds **George F. Rogalsky**, a member of the Cornell administration for 30 years and vice president since January 1948. Mr. Rogalsky will continue as a vice president, but will have other duties.

Dr. Lewis A. Wilson has been appointed by the board of regents of New York State as acting commissioner of education and acting presi-

dent of the University of the State of New York to succeed the late **Francis T. Spaulding**, who died on March 25.

William L. Nicholas, president of Nebraska State Teachers College, Peru, Neb., was shot and killed by a disgruntled member of the faculty April 25. Dr. Nicholas had been president of the college since 1946 and was 48 years old. The slayer also killed **Paul A. Maxwell**, head of the education department at the same school, before ending his own life. Dr. Maxwell was 56 years old and had headed the education department since 1929.

Rev. Dr. Charles W. Leitzell, 80, president emeritus of Hartwick College, Oneonta, N.Y., and former president of the Lutheran Synod of New York, died April 24. Dr. Leitzell re-

tired in 1939 after serving 10 years as president of the college and was among its cofounders in 1928.

Melvin Amos Brannon, former chancellor of the University of Montana (1923-1933), died recently at the age of 84 years. Prior to his appointment at Montana, he had been a member of several college faculties and for a three-year period was president of the University of Idaho. He was president of Beloit College, Beloit, Wis., from 1917 to 1923.

George Herman Gilbertson, business manager of Augustana College, Sioux Falls, S.D., for 30 years, died recently at the age of 75.

Dr. Levi Parker Wyman, vice president of Pennsylvania Military College, Chester, died recently at the age of 76.

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Business Manager or Treasurer—Of preparatory school or college; age 45; A.B. Harvard, M.B.A. Harvard Business School; 21 years successful business experience as executive in banking, manufacturing, government contract negotiator; now available. Write Box CW 98, COLLEGE AND UNIVERSITY BUSINESS.

Business Manager—Man who has a background of successful business experience in purchasing, handling personnel, public relations and administration, would like to become a college business official; excellent references and a keen interest in this field; a valuable man for any college or university. Write Box CW 97, COLLEGE AND UNIVERSITY BUSINESS.

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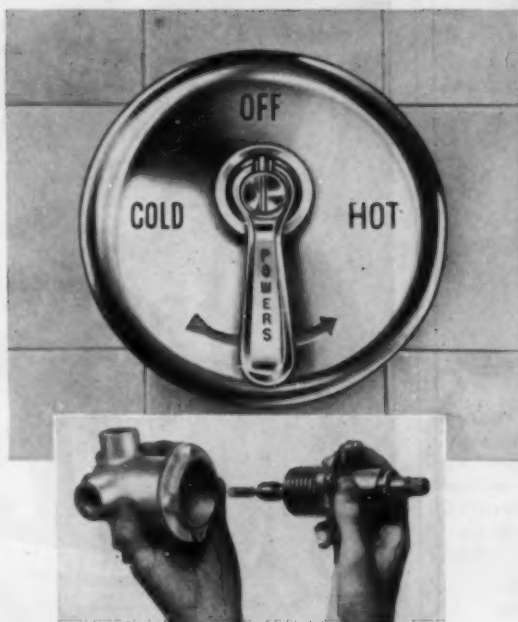
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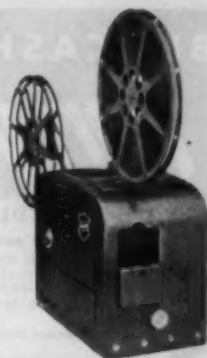
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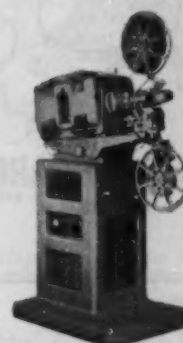
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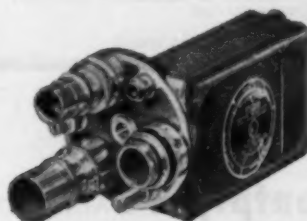
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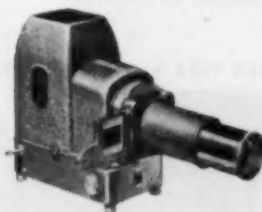
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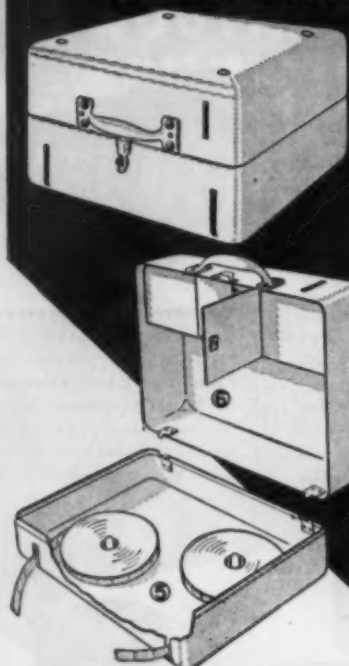
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(OR, THE STORY BEHIND FLOOR SAFETY)

THE CRIME:

Legs walk along . . . then suddenly slip and fall

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The chief suspects are **BODY WEIGHT MOMENTUM** and the

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TWINS exert a counter-force to hold the feet in place

BODY WEIGHT MOMENTUM gets greater when Legs are farther

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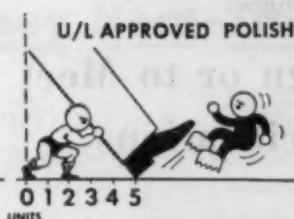
than the slip resistance of the floor. If it's slippery, there is little

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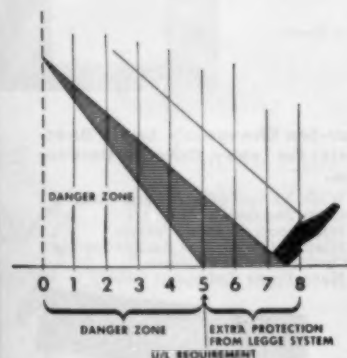
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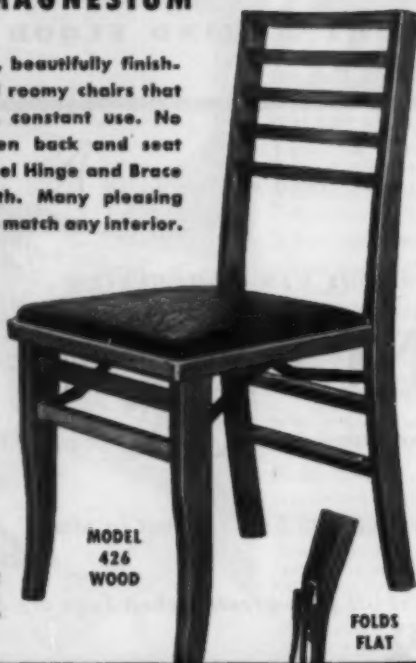
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Quality	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	
Appearance	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	
Durability	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	
Flexibility	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	



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P.S.—Each Libbey Heat-Treated Tumbler has chip-resistant rims guaranteed: "You get a new glass if the rim of a Libbey 'Safedge' Glass ever chips!"



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modern design
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Michigan State College STUDENT UNION BUILDING

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Shortly
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There's Warranted Sturdiness In All National Construction; Coverings in Staunch Plastic or Fine Durable Fabrics—

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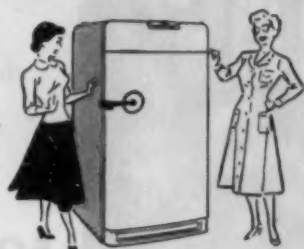


**NATIONAL FURNITURE
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MAIN OFFICE and PLANT, EVANSVILLE, INDIANA

LOOK AT THE NEW 1950 MODELS!

**LOOK
OUTSIDE!**



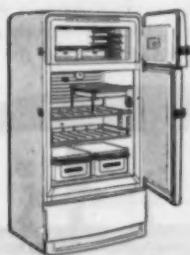
**LOOK
INSIDE!**



You can't match a **FRIGIDAIRE!**



Frigidaire De Luxe Models — 9 and 10.7 cu. ft. sizes
Other types of Frigidaire Models available from 4 to 17 cu. ft. sizes.



Frigidaire Imperial models have near-zero Locker-Top; new, improved Cold-Wall cooling with Refrig-o-plate.



Frigidaire Master models have colder-than-ever Super-Freezer. Food compartment refrigerated top to bottom.

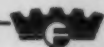
FRIGIDAIRE
—America's No. 1 Refrigerator

IN THE BRILLIANT new 1950 models of America's No. 1 Refrigerator, Home Economists will find dozens of new features which will definitely help in teaching modern food preparation and food-keeping techniques. Moreover, these sleek, streamlined Frigidaire Refrigerators will aid immeasurably in modernizing your Home Economics Department.

You'll find just the size and model Frigidaire to fit your needs...as there are 3 types, 4 series, 10 sizes...from 4 to 17 cu. ft. storage capacity. And remember, these brand new 1950 Frigidaire Refrigerators are available under the Frigidaire School Plan outlined below.

Exciting new features you'll want in your Home Economics Department

- New! Lustrous Ice-Blue, Gold and White Beauty!
- New Aluminum Rustproof Shelves—adjustable, sliding.
- Extra Storage Space—in less kitchen space!
- Extra-Large Frozen Storage Space—holds from 15 to 70 lbs.
- New, Extra-Deep Porcelain Hydrators—for fruits and vegetables!
- Improved Meter-Miser—makes more cold with no more current!



Save nearly ½ on Appliance Purchases under the Frigidaire School Plan!

Accredited schools may purchase for Home Economics Departments, Frigidaire Refrigerators, Electric Ranges, Food Freezers, Automatic Washer, Electric Ironer, Clothes Dryer, Electric Water Heaters at special school price—approximately ½ retail price. Further, purchasing school will be entitled to automatic replacement with new models for a 5-year period. See your local Frigidaire Dealer for full details. Or write Frigidaire, Dayton 1, Ohio.

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Other prep schools and colleges have found the simple answer to their dining hall problems in Crotty Brothers Food Service. This provides a complete, Crotty-trained staff under administrative direction and assures excellent food, efficient operation and much needed continuity of responsible management. Write for particulars to

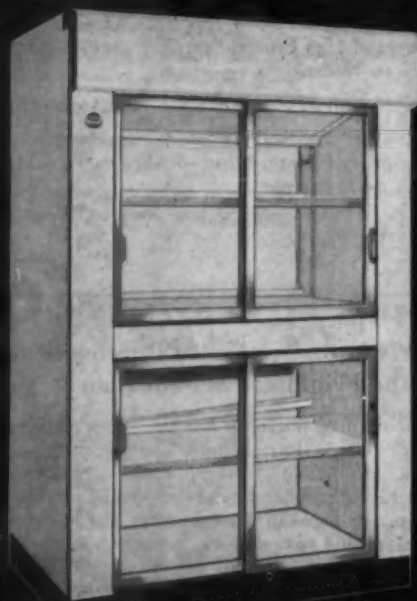
FOOD SERVICE
MANAGEMENT
SINCE 1930

CROTTY
BROTHERS INC.

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OPERATING IN
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41 CITIES

NEW! SLIDE-DOOR REFRIGERATORS



Three lengths — 53" (illustr.), 8', 12'.



Ideal for crowded kitchens.



Ideal for behind-counter service.

**Greater capacities!
Quicker, easier access!
Use less floor space!**

You'll save time, save money with these fine new welded-steel Slide-Door Reach-Ins by Tyler! Greater capacity per square foot of floor space! Easy-slide doors for speed, convenience and space saving. Attractive, durable porcelain enamel finish—front and interior. Outstanding **VALUE!** Write for data.

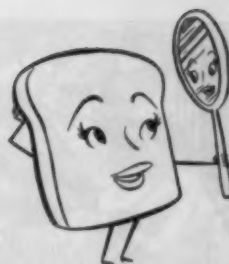
TYLER
FOR FOOD REFRIGERATION

Tyler Fixture Corp., Dept. U-5 Niles, Michigan. Rush illustrated data on Tyler Welded-Steel ☐ Slide-Door Reach-In Refrigerators ☐ Reach-In Refrigerators ☐ Beverage Coolers ☐ Beer Dispensers ☐ Walk-In Coolers ☐ Food Freezers.

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From 125 to 1000
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Every slice perfect
No bread waste, no time
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TOASTS MORE THAN 16 SLICES PER MINUTE!



**Completely
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Needs no watching;
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**Heavy-duty
construction**

Ruggedly built for
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(Fed. Excise Tax Incl.)

THE 16-SLICE MODEL pops up over 1000 slices
per hour. Other sizes include the 2-SLICE,
more than 125 slices per hour; the 4-SLICE,
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Larger models composed of
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No pre-heating, only
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"Of course . . . it's Electric!"

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This Modern Steel Rack



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in 5 Feet!**

Keep wraps aired and in press—save space... lengths to fit in anywhere. Individual coat rack units for self-service or complete Check-room layouts with the "One Check" numbering system. Six, 12, and 24 place costumers. Combination rack and locker units or complete locker rooms.

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IDEAL Power Mowers are designed to be true time savers—not time wasters. You can trust IDEAL heavy duty models for real economy in lawn care. From the big, heavy, 5 H.P. riding type "Caretaker" down to the smaller 1.5 H.P. walking type "New Victor", the entire IDEAL line is characterized by ruggedness, efficiency and mechanical reliability.



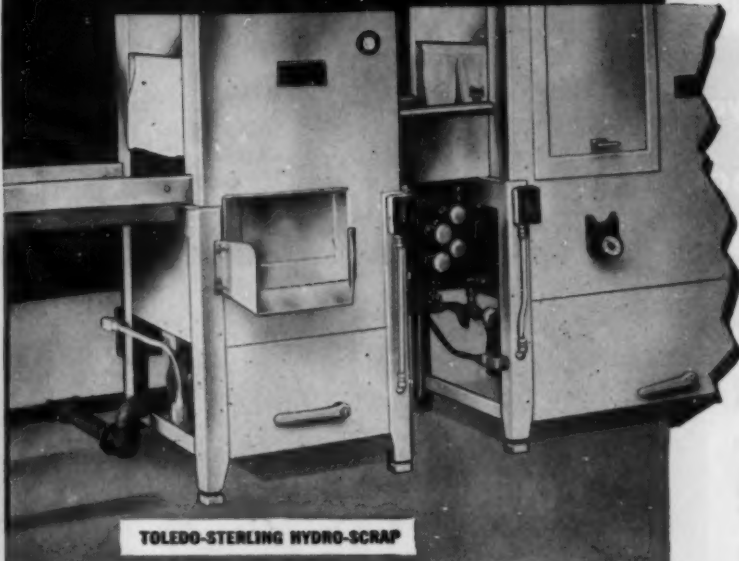
See your IDEAL dealer for information on models to suit your needs. Or write for catalogs.

**IDEAL
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PRE-DISHWASHING MACHINE



TOLEDO-STERLING HYDRO-SCRAP

- ★ Eliminates **HAND SCRAPPING**,
Brushing, Flushing
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... replenished by hot overflow
water from dishwashing machine.
- ★ **EASY TO CLEAN!**

Another great Toledo-Sterling Machine that saves labor and pares kitchen costs—the **HYDRO-SCRAP** automatically removes food scraps from china, glasses and table silver prior to mechanical washing! Teams up with any standard dishwashing machine—installed between the soiled dish table and the entrance end of the dishwasher. The Hydro-Scrap flushes table refuse from the entire contents of the dishrack. Soluble matter goes down the drain. Insoluble matter is discharged onto brass Separator Screen, and is raked directly into garbage can at end of meal period. No dripping refuse container to handle! Practical and efficient for today's needs... backed by Toledo engineering and precision manufacture. Send for Bulletin No. SD-10. Toledo Scale Company, Sterling Division, Toledo 12, O.



PEELERS for Potatoes and Vegetables... complete line, 15, 30, 45, 50, 60 and 70 lb. capacities. Rapid operation—easy cleaning.



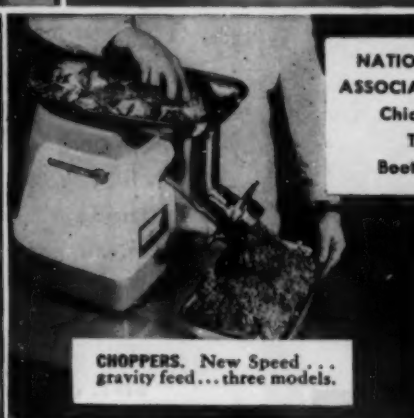
CONVEYOR DISHWASHING MACHINES... in a full range of sizes and capacities.



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CHOPPERS. New Speed... gravity feed... three models.

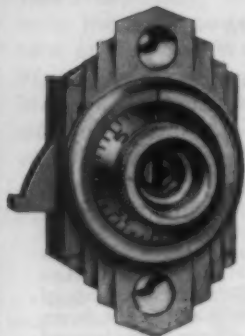


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in 15 seconds
or less



S-540 is self-locking, has the patented Dudley cylinder, of advanced pin-tumbler design, in a die cast case.

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means extra security



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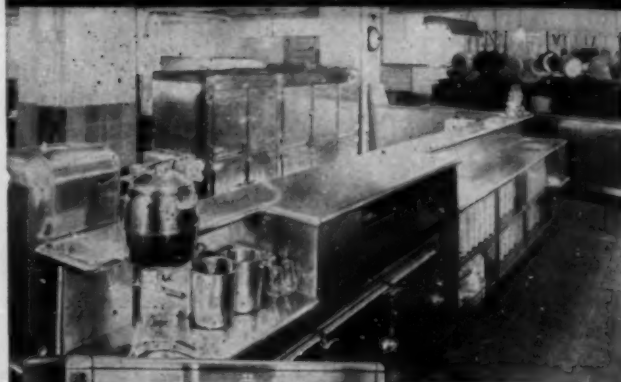
HERRICK

STAINLESS STEEL REFRIGERATORS

PERFORMANCE-PROVED

IN THE
FAMOUS
KITTY HAWK
ROOM
OF THE

**DAYTON
BILTMORE**



Above is a partial view of the Kitty Hawk Room kitchen in the Dayton Biltmore Hotel, Dayton, Ohio. Shown are HERRICK Models RSS30 and RSS66. These are but two of the many HERRICK units used in the kitchen.



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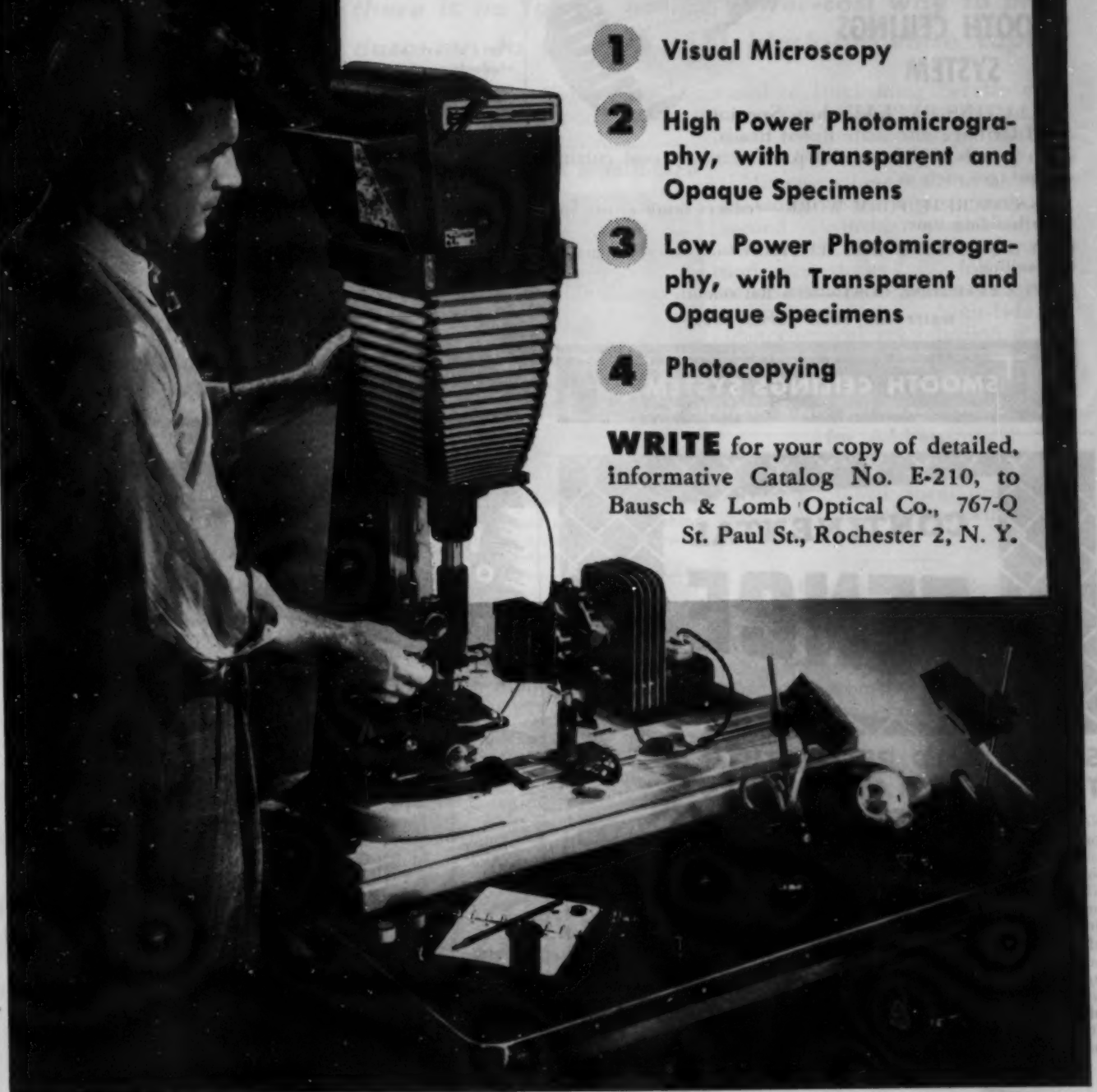
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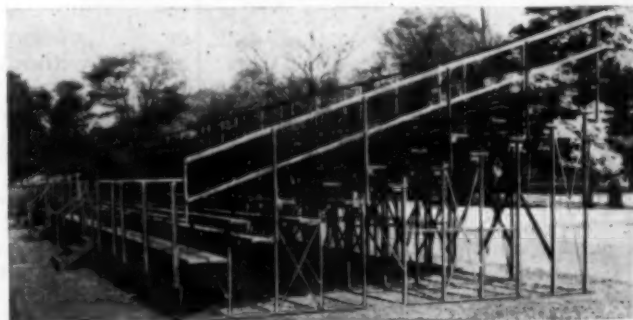
BOTH OF THEM . . . Kelly on the field and Joe Spectator in the grandstand.

Because, Joe and several thousand others are seated on a Wayne Grandstand, and "Wayne Stands For Safety."

To you, a prospective purchaser of a grandstand or gymstand in whose hands the safety of many people may rest, it's good to know that all Wayne stands utilize the construction principles that characterized Wayne Observation Towers during the war.

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Order Duet Desk F-142-21

NEW Duet Desk by SIMMONS

Student inspired! School approved!

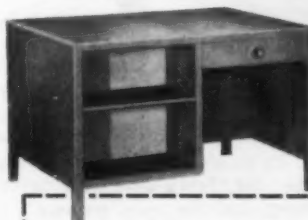
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Note how the Duet Desk gives each student two large bookshelves. Reference and textbooks are in plain sight and easy reach. DESK ALSO AVAILABLE WITH LINOLEUM TOP.

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SIMMONS COMPANY

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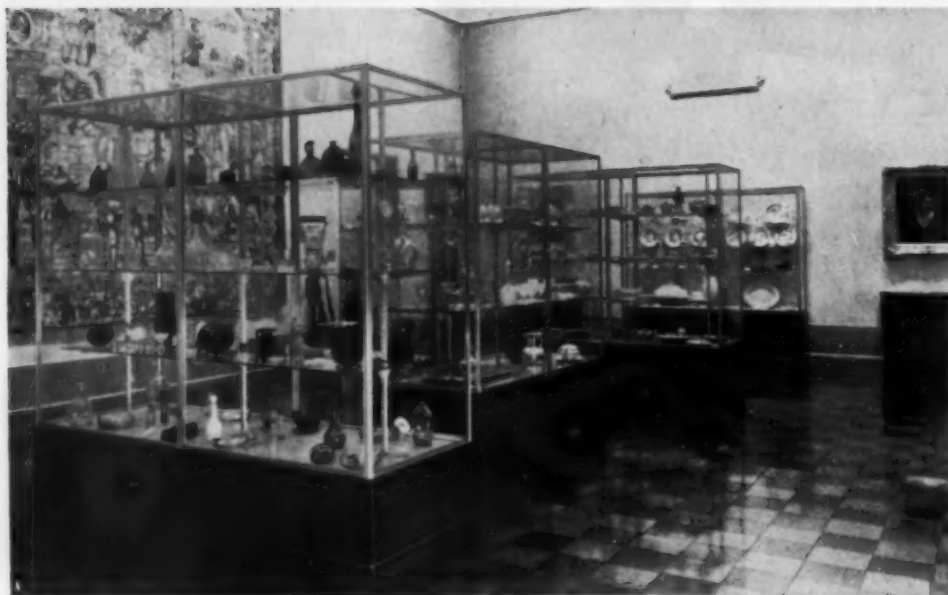
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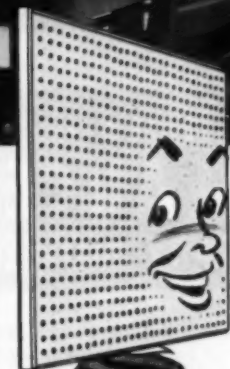
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QUIET goes to college, too!

... And it's a good thing it does because students and professors, alike, benefit directly from the immediate benefits of modern Sound Conditioning.

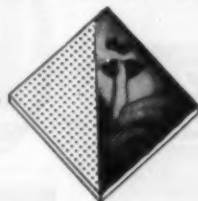
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Sound Conditioning Products

PRODUCTS FOR EVERY SOUND CONDITIONING PURPOSE

AUXILIARY CHAIRS

STATIONARY

**DURABLY CONSTRUCTED FROM
TUBULAR STEEL
AND HARDWOOD**

to provide
years of
**TROUBLE FREE
COST FREE
SERVICE**

in
**schools
institutions
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industry**



- 1-inch 18 gauge steel tube frame welded into one unit.
- 13 gauge angle steel seat support.
- Tubular, storage type leg stretchers.
- Polished glides — removable by tool only.
- 4 standard seat heights and sizes.
- High-bake enamel finish frame, lacquer satin finish wood parts.
- Solid hardwood or curved plywood styles.

Write for catalog of complete seating line.

Exceptionally sturdy chairs built to withstand the hardest usage. Tubular frame is welded into one integral unit with comfortable posture seat and backrest securely fastened with both rivets and screws for maximum strength. Smooth contact floor guides are attached to prevent removal except by use of tool. Available in two styles as illustrated in standard seat heights of 13, 15, 17 and 18 inches. Alternate sizes from 12 to 18 inches optional. Brown Taupe or Beige frame with School Brown or Natural wood parts.



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Made of steel wire, heavily galvanized, Realock Fence is nationally known for its rugged good looks, indestructibility, and long-lived economy.

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Why buy **TWO** When **ONE** Will Do? if it's a **PEARCE** *Air-Lift* ROTARY MOWER



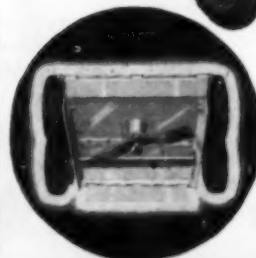
The Pearce "Air-Lift" Rotary Power Mower speedily cuts grass of any height or texture on the roughest terrains, often eliminating the need for more than one mower, around such places as parks, cemeteries, golf courses, school grounds, etc. Therefore,

we say Why Buy Two When One Will Do? See the Pearce before You Buy . . . Pearce with the

"Air-Lift" suction principle of operation that raises down or matted grass into high efficiency cutting zones for clean uniform cutting. Available in 3

sizes to handle any grass cutting situation. Get the Mower

Made To Cut Everything . . . Built To Last A Lifetime.



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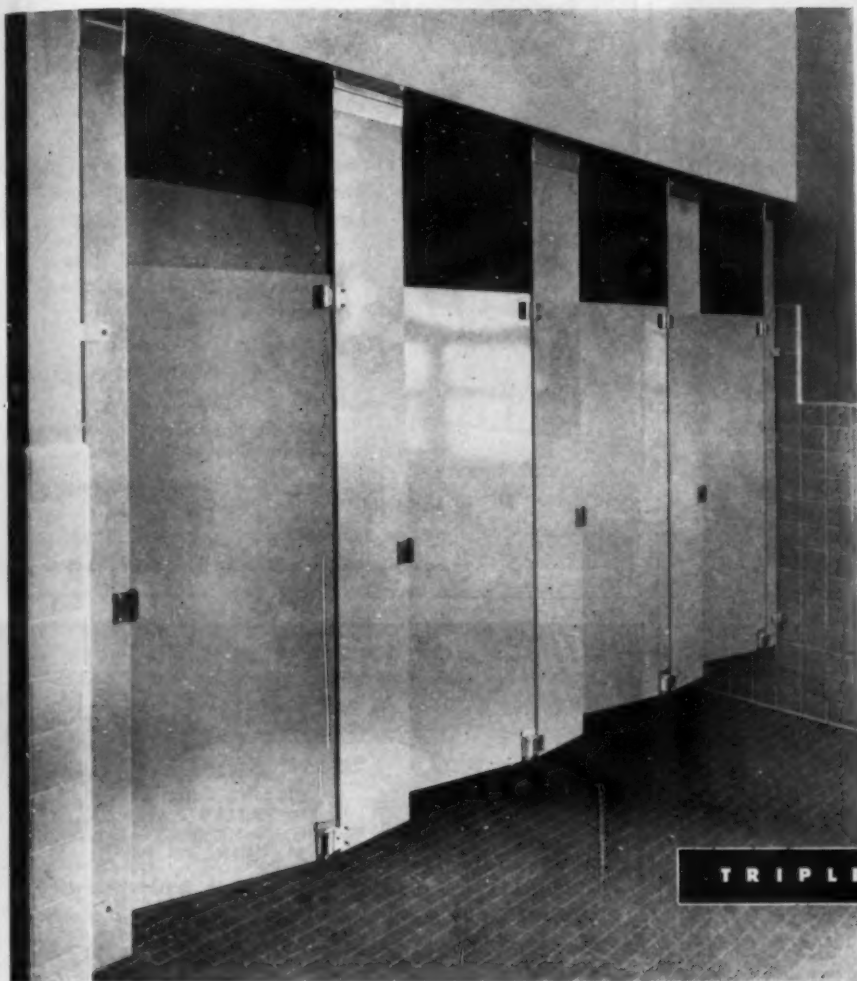
Valuable Booklet containing complete information on Pearce "Air-Lift" Rotary Power Mowers. You'll want to compare it feature for feature with other power mowers . . . to see why Pearce is the low-cost lawn maintenance answer. Write Dept. CU-550.

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CHOOSE WEISART COMPARTMENTS



Ceiling-Hung WeisArt Installation in Edina High School, Edina, Minn. Lang & Raugland, Architects and Engineers. Maurice Schumacher & Associates, Contractors

For fine appearance, maximum cleanliness, and thorough-going quality of construction which withstands the hardest usage, specify WeisArt toilet compartments.

Designed and built in harmony with the most modern trends, WeisArt compartments are suited for use in the finest of modern structures. Measured in terms of years of dependable and trouble-free service their use is both practical and economical.

Ceiling-hung WeisArt compartments, as shown in this installation, leave the floor clear for easy cleaning. The same quality construction is available in WeisArt floor-braced compartments. These compartments are finished with best quality synthetic high baked enamels in a wide range of colors.

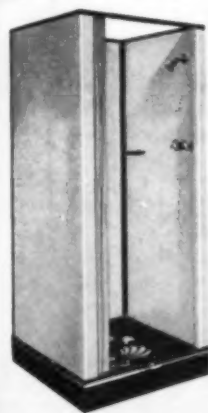
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Doors, stiles and partitions are of highest class flush steel construction, with edges locked and sealed. Galvanized surface has smoothness equivalent to furniture steel, affording best known corrosion resistance.

This galvanized surface is Bonderized which gives additional corrosion resistance and assurance of positive adhesion of enamel to the metal.

Baked synthetic primer and enamel, separately baked, combines highly protective surface coating with lustrous beauty in a wide range of colors.

Your architect knows the Weis reputation for quality in design, engineering and manufacturing. Ask him to specify WeisArt compartments and Weisway Cabinet Showers in your new buildings or in your modernization work. For detailed information write



QUALITY-BUILT CABINET SHOWERS

Manufactured to stand up under hard usage, Weisways are the answer to bath requirements in college and university buildings. Guaranteed leakproof, Weisways require no special treatment of building walls or floor, insure long years of satisfactory service.

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CHICAGO 44, ILL.

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Durable Steel Construction —
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Unusually quiet in handling and use, due to exclusive mechanism and rubber floor contacts —
Grip the floor firmly —
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DOLGE is proud of its reputation for producing the very highest quality liquid soaps, and invites comparison on any basis—clarity, brilliance, pleasant aroma, rich lather. In addition, DOLGE soaps are non-irritating, will not turn cloudy or develop rancid odors even upon prolonged storage.

Whether you select BALMA (comparable to the most expensively perfumed cake soaps), modestly-priced VELVA or low-cost KLEENWELL, you'll receive TIP-TOP VALUE PER DOLLAR SPENT!

Dispensers available in several types

Write for literature—have your DOLGE Service Man demonstrate these outstanding liquid soaps.

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WESTPORT, CONNECTICUT

Hasco CAFETERIA TABLE and CHAIRS



Hasco Plastic Top TABLES

Natcolite Top Colors: Red, Blue, Tan Natural and Solid Black.

	Each	Lots of 12
MA326 24x24	\$14.95	\$14.20
MA326A 24x42	22.60	21.50
MA326B 30x30	20.50	19.50
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SPECIFY WOOD Finish and COLOR of Top.

Tables are thoroughly kiln dried lumber, finished either Honey Maple or Walnut.

Tops are cigarette proof, stain-proof, chip-proof, heat resistant as well as alcohol proof.

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\$8.50 Each

\$8.25 Ea. in Doz. Lots
Specify Wood finish and Color of Upholstery desired

Packed and Sold
2 Chairs to a Carton
F.O.B. Penn. Factory



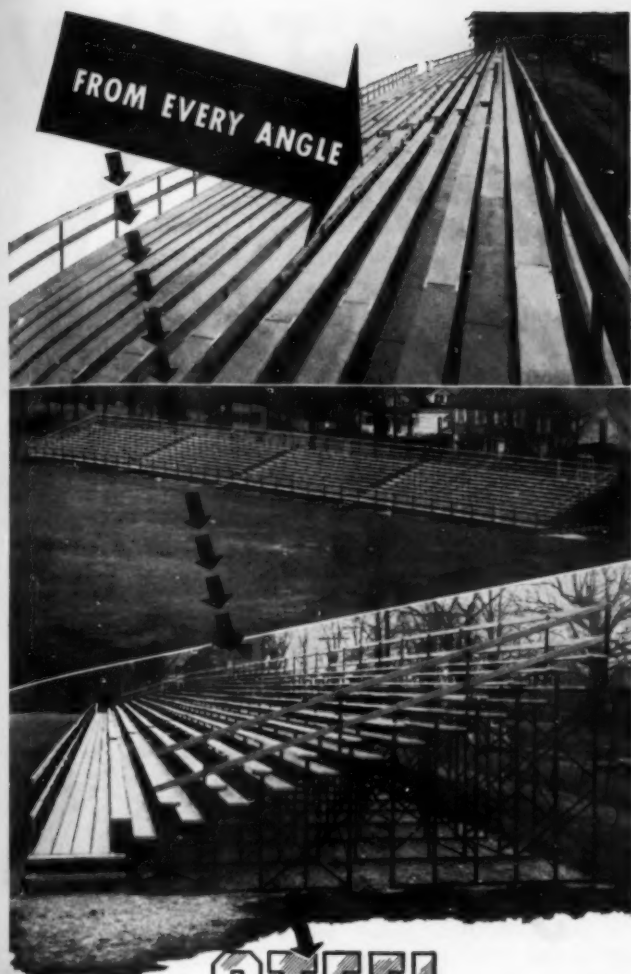
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Rows High	8	10	10	12
Capacity	520	1000	1430	2028

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FIBRETONE... the acoustical ceiling with built-in noise traps

Thousands and thousands of "noise traps" to help end harmful noise—that's the secret of Johns-Manville Fibretone Ceilings for classrooms, corridors, and all noise centers.

Each 12"-square unit of Fibretone contains hundreds of small cylindrical holes drilled in the sound-absorbing material. As sound waves strike the ceiling, they enter the holes where the sound energy is dissipated.

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trap and dissipate irritating, unnecessary noise.

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Other J-M Acoustical Ceilings include Transite[®], made of asbestos; and Sana-coustic[®], perforated *metal panels* backed up with a fireproof sound-absorbing material. For a prompt estimate, or free book on "Sound Control," write Johns-Manville, Box 290, New York 16, N. Y.

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WHAT'S NEW

MAY 1950

Edited by Bessie Covert

TO HELP you get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 100. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. COLLEGE and UNIVERSITY BUSINESS will send your requests to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

Sanistand



A new toilet fixture has been introduced for use in women's rest rooms. Known as the Sanistand, the fixture is a woman's urinal made of genuine vitreous china and designed especially to prevent the spread of germs and improve the sanitary conditions of women's rest rooms. It need not be touched in usage and has no seat. The manufacturer states that although it can be used as a regular water closet, it is being offered primarily as a urinal and should, therefore, be installed along with ordinary water closets in women's toilet rooms.

The Sanistand is available in white and various pastel colors and presents a modern, hygienic appearance. Its streamlined shape permits thorough cleaning in a minimum of time and the fixture is easy to install. It is equipped with a foot-operated flush pedal. The fixture has been tested in actual use in a number of colleges and other institutions and minor changes were made in the final unit to conform to suggestions received. The unit is 18 inches high, modern in design, has a large water area, slanted rim and large outlet. It is designed as a convenience to the user and to simplify the work of keeping the rest room sanitary. American Radiator & Standard Sanitary Corp., Dept. CUB, Pittsburgh 30, Pa. (Key No. 220)

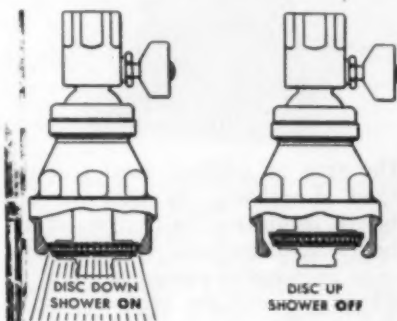
Steel Frame Furniture

A newly developed steel frame davenport and chair have been introduced

especially for institutional use. The furniture was designed and engineered by the National Furniture Manufacturing Company in cooperation with the U. S. Rubber Company and the Stran-Steel division of the Great Lakes Steel Corporation. The furniture has a steel frame, foam rubber cushioning and heavy gauge covering material, thus making it practical for use in lobby, reception room, solarium and other areas where it would have hard usage. National Furniture Mfg. Co., Dept. CUB, Evansville, Ind. (Key No. 221)

Self-Cleaning Shower Head

The new Act-O-Matic self-cleaning shower head is the result of years of research by the Sloan Valve Company. Designed to eliminate the recurring problem of limed or clogged and dripping shower heads, the new Act-O-Matic fea-



tures a unique spray disc which moves upward and downward automatically. When the water is turned on the disc moves downward into shower position, delivering a cone-within-cone spray of maximum efficiency. When the water is turned off the disc moves upward into drain position. By this action a large, free waterway is opened through which the shower head drains instantly and completely, washing out all sand particles and other water-borne substances that might otherwise clog an ordinary shower head.

The shower head is furnished chrome plated with ball joint and volume control. Vandalproof models are available on request. Being automatically self-draining, the Act-O-Matic is always self-cleaning. Sloan Valve Co., Dept. CUB, 4300 W. Lake St., Chicago 24. (Key No. 222)

Metal Folding Chair

The new Royal metal folding chair is carefully constructed for strength and attractive appearance. The telescoping back legs simplify the mechanism. The frame is constructed of $\frac{3}{8}$ inch diameter steel tubing with all cross bracing completely welded. All joints and connections are assembled for strength and the solid rubber feet protrude from inside the tubing providing a large bearing and wearing surface on the floor. The chair is available in four models: the all-metal chair with one piece steel seat, the scroll shaped steel seat with tempered Masonite panel, the padded, upholstered seat, and the de luxe Royalchrome with Flexspring seat and padded back. Royal Metal Mfg. Co., Dept. CUB, 175 N. Michigan Ave., Chicago 1. (Key No. 223)

China Design

The new Winthrop shape in china service has been designed to offer a more home-like atmosphere in institutional china. The new line is outstanding because of its attractive edge design which differs from the conventional smooth edge design. Also new is the "bridge-type" body construction which combines light appearance with exceptional strength. It is highly resistant to mechanical shock, heat and pressure.

Three cup designs are available in the new Winthrop shape, developed by Syracuse China research laboratories, and the patterns include central floral designs with solid color borders as well as all-



over flower and leaf motifs. Onondaga Pottery Co., Dept. CUB, Syracuse 4, N.Y. (Key No. 224)

Steel Classroom Window



Increased light effectiveness, economy in original cost and superior maintenance factors, from the standpoint of window washing and replacement of broken glass, are features claimed for the new Truscon Intermediate Classroom Window.

This new type of intermediate weight steel window is custom built in widths up to 10 feet maximum and in heights up to 9 feet. The large upper fixed light is recommended for glazing with one of the many types of $\frac{1}{4}$ inch wire glass in a light diffusing pattern. The lower portion, or vision strip, is glazed with $\frac{1}{8}$ inch or $\frac{1}{4}$ inch clear glass. Double insulating glass, heat absorbing glass or non-glare glass may be used as alternate glazing possibilities, depending upon geographical location, climatic conditions and degree of window opening exposure to direct solar rays. Either or both lower panels may be vented as desired. **Truscon Steel Co., Dept. CUB, Youngstown 1, Ohio. (Key No. 225)**

Spotlight Lamp

The new General Electric 200 watt Narrow-Beam Projector Spot is a sealed beam type spotlight lamp intended for long-range indoor and outdoor illumination applications. A compact spotlight of high candlepower consuming 200 watts and projecting a narrow beam of approximately 20 degrees, the lamp is equipped with a side-prong base and a compact bulb of pressed heat-resistant glass. **General Electric Co., Dept. CUB, Nela Park, Cleveland 12, Ohio. (Key No. 226)**

Vinyl-Cork Flooring

Dodge Vinyl-Cork Tile is a new flooring which offers many outstanding qualities. Its cork base makes it quiet, comfortable, resilient and serves as an insulation against heat and cold. Its vinyl top is non-slip, wet or dry, provides unusually long wear, does not harden with age, is fire resistant, scratch and

abrasion resistant and is easily maintained, it being necessary only to wash with soap and water, no wax being needed.

The flooring is water repellent and is available in 22 different solid color and marbelized combinations which do not fade or discolor. No special adhesives are required for laying the flooring which is easy to handle and does not crack, chip or break when being laid. It is available in standard size squares, 6, 9 and 12 inch and in $\frac{1}{8}$, $\frac{3}{16}$ and $\frac{1}{4}$ inch thicknesses with border strip material up to 36 inches in length. **Dodge Cork Company, Inc., Dept. CUB, Lancaster, Pa. (Key No. 227)**

Dura-Sorb Mop Yarn

Dura-Sorb is the name given to a new specially spun cellulose designed for use in wet mops. It is extremely durable and has superior ability to absorb water and dirt emulsions instantly. It is easily rinsed of dirt and grime by wringing or rinsing under running water and dries quickly in a sanitary condition.



The type of cellulose used and the method of spinning the yarn are said to be the reason for the fast rate of absorbency in Dura-Sorb. Its durability permits economical operation, even on rough floors, and the original cost is moderate. The new mops come in a variety of sizes to fit any standard mop holder. **American Standard Mfg. Co., Dept. CUB, 2505 S. Green St., Chicago 8. (Key No. 228)**

Automatic Valve

A simplified ball-type seating mechanism is used in the improved automatic vent and drain valve recently introduced by Crane Company. The improvements have been made to assure more accurate seating and longer life. The valve is easy to install and its operation is fully automatic. The new valve is available in a complete range of sizes to take care of air requirements up to 150 pounds per square inch and of water requirements up to 125 pounds per square inch. **Crane Co., Dept. CUB, 836 S. Michigan Ave., Chicago 5. (Key No. 229)**

Automatic Fire Alarm

The new Fyr-Cry automatic fire alarm is mechanically built and operated like a clock. It is designed for installation at points where fire is most likely to break out and the mechanism is copper plated to prevent rust. The alarm is completely automatic, a special fuse releasing the alarm the moment the temperature rises above 133 degrees. No electricity is required to operate the Fyr-Cry and it is always ready for use without attention. **The Fyr-Fyter Co., Dept. CUB, Dayton 1, Ohio. (Key No. 230)**

All-Purpose Matting

Do-All Matting is a low priced, all-purpose matting made of rubber with strong cords used as a binder. It comes in 35 by 35 inch units of four 17 inch square sections which can be easily cut with a sharp knife if desired. It is also available in rolls of 2 to 7 units. The new matting is $\frac{1}{4}$ inch thick and comes in 4 mottled colors. **D. W. Moor Co., Dept. CUB, 1717 Adams St., Toledo 2, Ohio. (Key No. 231)**

Tube-Ice Package Unit

Designed to manufacture 2000 pounds of "cylinder" or crushed ice in 24 hours, the new Tube-Ice Package Unit contains a 3 h.p. water cooled condensing unit and has an insulated stainless steel lined ice bin which will hold approximately 650 pounds of ice in storage. All operations of the machine are automatic, including shut-off when the storage bin is full. A reversible cutter permits the making of ice in the form of cylinders or crushed.

The ice bin can be opened at the top for removing small quantities of ice but if larger quantities are needed, both doors can be opened for greater access



to the ice. **Henry Vogt Machine Co., Dept. CUB, 10th & Ormsby Sts., Louisville 10, Ky. (Key No. 232)**

Aluminum Shade Screening

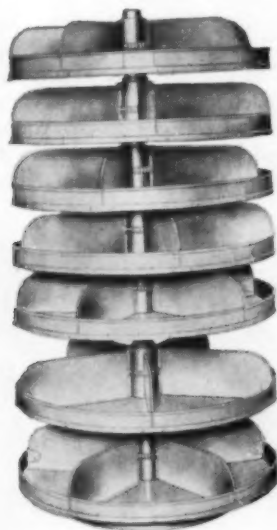
Kaiser Aluminum Shade Screening is a strong, lightweight aluminum screen consisting of small horizontal louvers permanently tilted at a slight downward angle. It is designed to keep room temperatures cooler when the sun shines by stopping the intense heat rays at the screen before they pass through the glass. Glareless light and indoor shade are provided by use of this new screening which also protects against insects.

Tests made by the manufacturer indicate that the screens are effective in keeping out a large percentage of the sun's heat in the summertime in areas not air conditioned and also reduce the amount of cooling needed in air conditioned rooms. The screening permits good ventilation, reduces maintenance problems since it requires no painting, reduces fading of fabrics and rugs by the sun, and is easily installed. **Permanente Products Co., Dept. CUB, 1924 Broadway, Oakland 12, Calif. (Key No. 233)**

Booster Unit

A thermostatically controlled, efficient electric booster unit has recently been introduced for small and medium sized dishwashing machines to provide the needed amount of 180 degree final rinse water. The new unit provides 35 to 40 degree water temperature rise in a one minute cycle. It can be built as part of the new Universal dishwasher or mounted and installed for use on present equipment. **Universal Dishwashing Machinery Co., Dept. CUB, Nutley, N. J. (Key No. 234)**

Revolving Bins



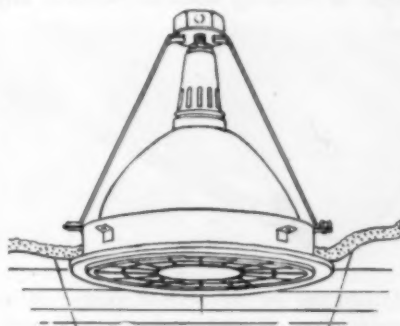
Of particular interest for use in store-rooms are the new revolving bins recently announced. These are complete storage units, each shelf with a continu-

ous label holder, and are available in 7 shelf unit, 4 shelf unit and counter top revolving bins. Up to 5 additional dividers can be added to separate each bin into smaller openings and wide spacing on the 2 bottom shelves allows for full visibility. The bins are designed to save time and steps, speed up service and increase availability of stored parts. They revolve easily in either direction, are stabilized to prevent sagging and are finished in green baked-on enamel. **Lyon Metal Products, Incorporated, Dept. CUB, Aurora, Ill. (Key No. 235)**

Gymnasium Lights

A new line of Alzak Aluminum High Bay Gymnasium Lights in both exposed and recessed types has recently been announced. The new lights have reflectors engineered for 60 degree beam and are protected with heavy gauge wire guards. They are designed to be used with or without Concentric Louvres for shielding. The lights are constructed for easy maintenance.

The recessed types are hinged in plaster ring for servicing and cleaning



from above. Exposed types have hinged bottoms and lamps may be quickly changed, from below, through the center hole in the wire guard. **The Edwin F. Guth Co., Dept. CUB, 2615 Washington Ave., St. Louis 3, Mo. (Key No. 236)**

Soap Dispenser

The new Bobrick 18 push-up Liquid Soap Dispenser is the newest addition to the line of liquid, lather and powdered soap dispensers and wall-type gravity feed systems offered by the manufacturer. It has a heavy metal one-piece highly polished chrome plated body and is designed for easy removal and filling. When filled and returned to position, the globe is automatically locked in place. The leakproof vacuum feed valve is also secured in the mechanism so that it cannot be taken from the dispenser. The Bobrick 18 is a sturdy, efficient dispenser designed to sell at a low price. **Bobrick Mfg. Corp., Dept. CUB, 1839 Blake Ave., Los Angeles 26, Calif. (Key No. 237)**

Compartment Water Coolers



Two new 3-Temp, compartment-type water coolers, providing 50 degree drinking water for 25 to 30 persons and a 35-38 degree refrigerated storage space for food, beverages or pharmaceuticals, together with a freezing unit which produces 3½ pounds of ice cubes at one freezing, have recently been introduced. As many as 40 half-pint bottles of milk or 29 beverage bottles can be kept in the stainless steel storage compartment at one time in either unit, one a bottle and the other a pressure bubbler model.

The desired temperatures are maintained in each of the 3 compartments by the "Magi-Trol" Control, regardless of the load or heavy duty placed on any one. The coolers have a full-hinged door and lock-type, snap catch. They are equipped with a hermetically sealed refrigeration system. **Westinghouse Electric Appliance Div., Dept. CUB, Springfield, Mass. (Key No. 238)**

Thermostatic Water Controller

Model "BAM" is a new thermostatic water controller for group showers and purposes requiring multiple outlets. It controls thermostatically the mixing of hot and cold water to deliver it at the desired constant temperature. Failure of the cold water supply causes the hot water seat to close and prevents scalding, and failure of the hot water supply causes the cold seat to close.

Constructed of brass, copper and bronze, the unit has bronze built-in strainers and check valves which are easily removed. The new controller is carefully assembled and set to deliver water at any temperature between cold and 110 degrees F. A higher or lower maximum temperature can be furnished if desired. Adjustments within the range allowed are easily made and the controller can be locked at any desired setting. **Lawler Automatic Controls, Inc., Dept. CUB, 453 N. MacQueston Pkwy., Mount Vernon, N.Y. (Key No. 239)**

Magnetic Tape Recorder



The new Educational Model BK-428-B Brush Soundmirror magnetic tape sound recorder has a number of improvements. The frequency response has been extended, the output increased to 2½ watts for greater volume to permit use in large classrooms without need for a separate amplifier, and the case now is equipped with handles to make it easily portable.

The new model is equipped with the RCA accordion cone loud-speaker for high quality reproduction. It may be played through its special speaker or through radio, separate speaker, amplifier or public address system. The model is available in an attractive mahogany cabinet in either blond or dark finish. It is light enough to be carried from room to room and a special panel on the back is designed for telephone type plug connections for radio input, microphone input and external speaker output. According to the manufacturer, the model is approved by Underwriters' Laboratories. **Brush Development Co., Dept. CUB, 3405 Perkins Ave., Cleveland 14, Ohio. (Key No. 240)**

Filmstrip Cabinet

The MF-6 filmstrip storage cabinet has recently been improved for more efficient filmstrip storage. Sectional dividers have been put into the drawers, thus making it possible to file the cans containing filmstrips more accurately and to prevent their sliding in the drawers. Better indexing and quicker finding of the desired filmstrip are thus possible with the new model. **Neumade Products Corp., Dept. CUB, 330 W. 42nd St., New York 18. (Key No. 241)**

De Luxe Flexboard

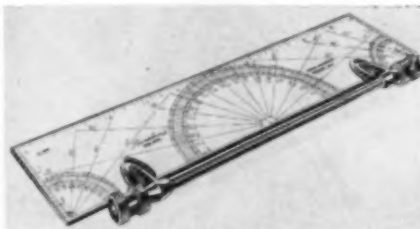
De Luxe Flexboard is a sheet material made of asbestos and cement and featuring a fabric pattern. It looks like a textured material, such as colored linen cloth, but is hard and smooth to the

touch. The finish is fused into the base sheet, thus making it practically impossible to peel or blister. The finished product is alcohol-proof, greaseproof, highly resistant to acids, alkalines and chemicals, is not marred by burning cigarettes and is shock resistant. It withstands high humidity, hot water, steam, sun and heat and may be applied either by adhesives or by mechanical fastenings.

The 6 colors available in the new material—red, blue, green, yellow, tan and peach—have been developed in tones to harmonize with decorating schemes. De Luxe Flexboard is ¼ inch thick and is available in sheet sizes 4 by 4 and 4 by 8 feet. **Johns-Manville, Dept. CUB, 22 E. 40th St., New York 16. (Key No. 242)**

Pocket Drafting Machine

The Paralane, a precision instrument small enough to be carried in the pocket, provides a drafting machine for the use of students as well as teachers and professional men. It offers a combination of a 32d in. scale and protractor design, with the moving parts, which makes it useful as a T-square, parallel rules, triangle or drafting machine without any



adjustments or additional parts. It is completely self-contained and requires no clamps or board mountings to remain in alignment. Parallels are scaled rapidly without raising the instrument from the board and it is excellent for cross-hatching. Angles and tangents are accurately and rapidly projected with the Paralane.

Constructed of a sturdy transparent section with precision-machined metal moving parts, the Paralane is accurate but inexpensive. It measures only 10¼ by 3¾ inches over-all. **Loomis Industries, Dept. CUB, 516 Park Way, Piedmont 11, Calif. (Key No. 243)**

Vegetable Peeler

A new low cost, portable, stainless steel vegetable peeler has recently been introduced. Known as the Hydra-Peel, the machine is constructed like the larger peeling machines. It delivers 20 pounds of peeled potatoes per minute, the skins being removed by gentle abrasive action. A convenient door and chute eliminate lifting, tipping or tilting. The machine is designed for drainboard use. **Castalloy Co., Inc., Dept. CUB, 12 Station St., Brookline, Mass. (Key No. 244)**

Air Distributors

New products are now available for more efficient air distribution and regulation of air volume for ventilating and air conditioning systems. The new Barber-Colman Uni-Flo grille has integral volume control combining efficient, draftless air distribution and regulation of air volume in the one unit. Tamper-proof adjustments accessible from the grille face regulate air volume and direction. Removable cores facilitate duct access, cleaning and redecoration. The Uni-Flo grilles are supplied in gray prime coat or in a wide selection of electroplated metal finishes.

The new Venturi-Flo ceiling outlets are attractively designed for efficient air distribution and versatility. Model J has air deflection supply outlet which is adjustable from vertical to horizontal. It thoroughly mixes room and supply air for rapid temperature equalization and noiseless and draftless air distribution. The new Model JC is a combination supply and exhaust unit similar in appearance to the Model J. The Venturi-Flo ceiling outlets are available in a wide range of sizes to meet requirements. **Barber-Colman Co., Dept. CUB, Rockford, Ill. (Key No. 245)**

Garbage Can Enclosures

Twin, heavy-duty steel enclosures designed especially for storage of 2 garbage cans, up to 30 gallons each, have been introduced to protect garbage from dogs, cats, rodents and insects. The two top deposit doors swing open and close on full-length, piano-type hinges and may be opened until the back of the door rests on the rear slanting side of the enclosure top to provide unobstructed garbage disposal. Inside and outside handles are provided for convenient closing of doors. Two front doors swing open 180 degrees to provide unobstructed removal and replacing of the garbage cans. Each can slides in and out on two runners and sides and back of the enclosure are protected by angle guide rails. A full par-



tion separates the two cans. **The Bennett Mfg. Co., Dept. CUB, Alden, N. Y. (Key No. 246)**

Grind-a-Leaf Mower

The Mow-Master Grind-a-Leaf is an attachment for the Mow-Master which collects and grinds leaves as the lawn is being mowed, and scatters them evenly over the grass as a fertilizer. Thus it performs three operations in one: mowing, clearing leaves and scattering fertilizer.

The Grind-a-Leaf is of light weight, aluminum alloy construction, except for wearing parts and shroud, and is powered by a Power-Pak utility motor. It is ruggedly constructed for long wear, is easily maneuvered, has shielded cutter blade, automatic governor, manually operated throttle control on handle bar, adjustable handle and is easily started. **Propulsion Engine Corp., Dept. CUB, 7th and White Eagle Rd., Kansas City, 15, Kans. (Key No. 247)**

Self-Scorer

The result of 26 years of educational research, the Self-Scorer is a unique teaching-testing tool designed to be used as an answer sheet for objective type quizzes. It gives immediate knowledge of right and wrong answers, increases learning and can be graded by the student as soon as the test is completed. Using it with objective tests, the student punches holes which are numbered to correspond with answer-choices on the examination sheet. **Science Research Associates, Dept. CUB, 228 S. Wabash Ave., Chicago 4. (Key No. 248)**

Allsteel Bleachers

The design of the new Allsteel Bleachers has been approved, according to the manufacturer, by the Wisconsin State Industrial Commission. Built for safety, the new bleachers are made in completely interchangeable sections, each of which is light enough to be carried by one man and will pass through any standard sized door. The simplified design and mass production make the bleachers economical in price.

The interchangeability of sections sim-



plifies storage and setup and the complete flexibility for indoor and outdoor use, and ease of assembly and disassem-

bly for changing requirements, make the new bleachers practical. The framework is made of "H" type welded structures and seat and footboards are of selected, kiln-dried structural 2 by 10 lumber. **Berlin Chapman Co., Dept. CUB, Berlin, Wis. (Key No. 249)**

Freezers

Three new "Quicfrez" model freezers are now available. Each model is built for maximum food storage space and each has a separate compartment for fast freezing. Metal food baskets are included with each unit. The all-steel cabinets have white bonderized finish and the hardware trim is designed for easy cleaning as well as attractive appearance. The units are hermetically sealed. **Sanitary Refrigerator Co., Dept. CUB, Fond du Lac, Wis. (Key No. 250)**

Ceiling Air Diffuser

An adaptation of the Kno-Draft Adjustable Air Diffuser, joined integrally with a square panel of lightweight metal, has been designed especially for use with



all standard acoustical and rectangular ceiling units. The simple design and flat silhouette of the diffuser make it blend with ceilings of this type. The diffuser retains adjustability for angle of air discharge, air volume control and other standard features. **W. B. Connor Engineering Corp., Dept. CUB, 114 E. 32nd St., New York 16. (Key No. 251)**

Blind Tape and Slats

A new washable, color-fast venetian blind tape, made of a special formula vinyl plastic reinforced with pre-shrunk Fortisan threads, is now available. Known as Flexalum vinyl plastic tape, the product combines cleanliness and durability with attractive appearance and color clarity. It is designed to be a lasting, integral part of venetian blinds, thus reducing maintenance.

Flexalum spring tempered slats for venetian blinds, of specially processed duratized aluminum, are flexible, tough and extremely light in weight. They do not sag or warp and the plastic finish, baked to the aluminum, does not crack, chip or peel. **Hunter Douglas Corp., Dept CUB, 150 Broadway, New York 7. (Key No. 252)**

Ditto D-45



A heavy duty general duplicator designed to handle any duplicating job, whether typed, handwritten or drawn, is provided in the new Ditto D-45 machine. It is a fast, flexible systems duplicator which reproduces 4 colors at once, can turn out 100 copies a minute and supplies 300 to 500 copies per master. The new magnetic Velvet Clutch makes operation barely audible whether stopping or at 30 per cent greater speed. It is designed to facilitate operation of the machine and to increase its service life.

Other innovations in the new D-45 include: a dial-controlled margin adjustment for instant, accurate register in small spaces on forms; a master clamp on the drum of the machine, foot pedal operated, and an optional line printing tray which automatically adjusts for copying each line on a master. The machine has stainless steel parts and ball-bearing rollers throughout. It copies on any card or paper from small labels to 14 by 15½ inches. **Ditto, Incorporated, Dept. CUB, 2243 W. Harrison St., Chicago 12. (Key No. 253)**

Multilith Model 75

The new Multigraph duplicator, the Multilith Model 75, has several improvements. Operation has been simplified, including immediate run even after periods of inactivity. Ink and water are mixed outside, thus ensuring automatic balance and making daily clean-up unnecessary. The new Simflo Control mechanically controls many steps formerly done manually and the compact, new Vacuum Feeder permits uninterrupted machine operation without stopping to load blank paper or to remove finished copies.

Copies can be reproduced from all types of Multilith Duplicating Masters with the new Model 75. Masters are prepared with pens, pencils, typewriters or other utensils for reproduction of business forms as well as all types of general duplicating. **Addressograph-Multigraph Corp., Dept. CUB, 1200 Babbitt Rd., Cleveland 17, Ohio. (Key No. 254)**

Product Literature

- The unusually attractive Rastetter Solid Kumfort chairs that fold are presented in a catalog, "Fine Furniture that Folds," recently issued by Louis Rastetter & Sons Company, 1326 Wall St., Fort Wayne 1, Ind. Made of wood or magnesium, the chairs are unusually light while providing rugged strength and serviceability for all purposes. In appearance the chairs would seem to be sturdy, attractive, permanent, conventional chairs; but they are easily and quickly folded to be moved from place to place or stacked away compactly for storage. The chairs are upholstered in Naugahyde in attractive colors, and the upholstery does not scuff, mark, split, peel or crack. Cards in the pocket of the descriptive folder contain chips showing the finishes available on the magnesium chairs and each item in the line is illustrated and described on a separate card. Special features of the new magnesium chair are presented in the center fold of the catalog. (Key No. 255)

- A color chart and 21 color chips are used in the new catalog on toilet compartments recently published by The Sanymetal Products Co., Inc., 1705 Urbana Rd., Cleveland 12, Ohio. The new 1950 Catalog 87 shows 5 types of Sanymetal Toilet Compartments and toilet room environments in colors. Construction details, specifications, hardware and a description of the materials used are included in the catalog. (Key No. 256)

- Detailed information on the complete line of classroom seating, teachers' desks, tables, kindergarten furniture, office and cafeteria furniture, wardrobes and folding chairs offered by the Franklin-Lee Co., 215 W. 68th St., Chicago 21 is given in the Condensed Furniture Catalog No. 65 recently released. (Key No. 257)

- The colorful 12 page Bulletin 749 issued by the Superior Electric Co., Hannon Ave., Bristol, Conn., entitled "Powerstat Light Dimming Equipment," displays Powerstat Dimmers in all sizes. Complete with photographs, circuit diagrams, outline dimensions and descriptive material, the bulletin contains a discussion on the creation of "atmosphere" through the dimming, brightening and blending of light. (Key No. 258)

- Typical applications of Heat Absorbing and Glare Reducing Coolite Glass are illustrated in a new catalog recently issued by Mississippi Glass Co., 88 Angelica St., St. Louis 7, Mo. Important facts covering the heat absorbing and glare reducing properties of the glass are presented with heat and light transmission tables and complete specification data. (Key No. 259)

- Technical data on insulated piping systems are offered in two new booklets recently published by the Ric-wiL Company, Union Commerce Bldg., Cleveland 14, Ohio. The Ric-wiL "Insulated Piping System Catalog—Section 480-4" illustrates and describes the manufacture, construction and installation of various types of insulated piping and gives technical data on piping systems and Ric-wiL services. "Insulated Piping System Technical Data—Section 480-5" contains well illustrated technical data and specifications on all phases of insulated piping. (Key No. 260)

- The new 1950 electric plant catalog, Onan Line Folder A-168, of D. W. Onan & Sons, Inc., Minneapolis 5, Minn., features "Electricity at your service for any purpose Anywhere." The booklet covers the complete line of Onan gasoline-driven electric plants, the direct current models and the battery-charging electric plants made by this company. Special accessories for Onan Electric Plants are also itemized and the model guide and general information section add to the usefulness of the catalog. (Key No. 261)

- Detailed instructions for sharpening 26 leading makes of power lawn mowers are given in a 36 page booklet, "How to Sharpen Power Mowers," published by Foley Mfg. Co., Dept. L-36, Minneapolis 18, Minn. Full descriptive data are supplemented by illustrations of each mower discussed. (Key No. 262)

- The new 1950 Athletic Equipment Catalog of W. J. Voit Rubber Corp., 1600 E. 25th St., Los Angeles 11, Calif., contains detailed information on some 75 items. Included are new and improved items of athletic equipment as well as standard items available from the company. (Key No. 263)

- "Klenzade Sanitation Specialists Catalog" is the title of a loose-leaf booklet, cross indexed by product names, product groups and cleaning jobs, giving full information on the line of detergents, bactericides and other products offered by Klenzade Products, Inc., Beloit, Wis. In addition to product data, the booklet carries a technical description of each product for those interested in the technical aspects. (Key No. 264)

- Information regarding the uses of U.S.P. Glycerine in handling and preparation of many types of foods and beverages is given in booklet, "Why Glycerine for Foods?" recently released by the Glycerine Information Service, Dept. PR, 295 Madison Ave., New York 17. Those responsible for food service will be interested in the new 20 page work which outlines the general reasons for glycerine's use in many foods and food products. (Key No. 265)

- Michaels Adjustable Astragals, a system of weather stripping designed to compensate for the expansion and contraction of doors, are described in a folder recently issued by The Michaels Art Bronze Co., Inc., 231 Court Ave., Covington, Ky. Diagrammatic drawings illustrate the various types of astragal available, made of extruded bronze, nickel or aluminum. (Key No. 266)

- The Model FL Student Microscope is described in the new Laboratory Microscope Catalog, D-185, recently issued by Bausch & Lomb Optical Co., Rochester 2, N. Y. Listed by series and model number rather than catalog number, each microscope is clearly illustrated, technically described and specifications for each are given. In addition, the catalog carries information on the basis of microscopy and fully describes each part of the instrument. (Key No. 267)

- The 1950 edition of the "Blue Book of Uniform Fashions" has recently been released by Angelica Jacket Co., 1419 Olive St., St. Louis 3, Mo. Containing 56 pages, the catalog illustrates the newest styles in uniforms of various kinds, in materials including "Velva-Glo" nylon, Monte Cloth, "Aire-Lite," poplin, broadcloth, gingham, valencia striped and nylon "cord weave." The 1950 catalog features a revised and simplified measurement chart for men and women and lists all Angelica sales representatives in principal cities. (Key No. 268)

Suppliers' News

Eclipse Sleep Products Inc., Milford St., Atlantic & Montauk Aves., Brooklyn 8, N. Y., manufacturer of sleep equipment, announces organization of a Contract Division under the management of Harry B. Bergere, located at 206 Lexington Ave., New York 16. The new division will serve hospitals, colleges and other institutions.

Griggs Equipment Co., Belton, Tex., manufacturer of school seating, announces the appointment of Frank A. Butler Jr. as General Sales Manager.

Lily-Tulip Cup Corp., 122 E. 42nd St., New York 17, manufacturer of paper cups and dishes, announces the opening of its newly constructed plant at Toronto, Canada.

Remington Rand, Inc., 315 Fourth Ave., New York 10, manufacturer of typewriters and other business recording and computing machines, announces the acquisition of the Eckert-Mauchly Computer Company of Philadelphia whose founders, Dr. John W. Mauchly and J. Presper Eckert, former University of Pennsylvania physicists, originated the "electronic brain."

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NAME

TITLE

INSTITUTION

Great Day!



This great design will be available in 4 sizes!



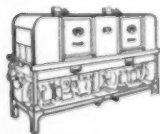
Key Hobart Dishwashing Principle:
Either the water-pattern must move, or the dishes themselves must move for thorough sanitation. You'll find this principle followed in every Hobart Dishwasher, whether by Hobart revolving wash, or by the Hobart dual-drive conveyor system, or by both.

It Scraps, Washes, Rinses, Final Rinses and Dries — the Greatest Conveyor Dishwasher in Hobart History!

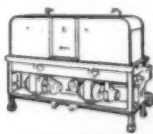
IT'S A GREAT NEW DAY in dishwashing! Here's the high capacity Hobart Model Flight-Type 26—with every dishwashing service you need built into one amazingly fast, cost-reducing machine. It is completely automatic, with dish-handling and human supervision reduced to the absolute minimum. Dishes are continuously racked between resiliently-designed "flight-links"—they are ready for use at the unloading end. Racks should be used for glasses and

silverware. Cups may be washed directly on the conveyor. It's a world-beater for controlling operating costs in larger kitchens!

This great dishwasher has to be seen to be appreciated. Other Hobart dishwashers and glasswashers too—all 18 of them. And the complete line of mixers, peelers, meat saws, slicers, choppers, tenderizers, coffee mills and scales. Your convenient Hobart representative stands ready to serve you—and you'll find Hobart service everywhere.



MODEL JM



MODEL XXM-3



MODEL CM



MODEL XM-3



MODEL DS



MODEL AM-7



MODEL LM



MODEL 1/M-P



MODEL SM-4



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The World's Largest Manufacturer of Food and Kitchen Machines

Mixers • Peelers • Slicers • Food Cutters • Meat Choppers • Meat Saws • Tenderizers



A Playing Surface that Promotes Confidence

HELPS MAKE A WINNING TEAM

So give your players the advantage of a *Gloss Seal finish* on your gym floors. *Gloss Seal*, which contains genuine phenolic resins, provides a playing surface that is thoroughly resilient, one that yields to and facilitates fast, safe footwork and teamwork. *Gloss Seal* also supplies a tough protective finish—resists heel burns, acids, alkalis, harsh soaps, water, friction—and won't darken or lose its transparency! Available in several *surface* and *penetration* types, *Gloss Seal* meets specific needs in classrooms, in corridors, and in places of exceptionally heavy traffic, as well as in the gymnasium.

Before you refinish the floors in your school, have a talk with the nearby *Finnell Floor Specialist*. His knowledge is broad and practical, sharing as he does *Finnell's* forty-seven years of experience in floor care.

For consultation, free floor survey, or literature on *Finnell Floor Seals, Waxes, Cleansers, Maintenance Machines, and Accessories*, phone or write nearest *Finnell Branch* or *Finnell System, Inc.*, 4405 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.



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